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An updated checklist for the hornworts and liverworts of Australia

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Abstract

Since 2003, knowledge of the diversity of the Australian hornwort and liverwort flora has improved as a result of collecting effort and study by a dedicated group of Australian-based researchers. Several of Australia's more challenging hornwort and liverwort genera have now been partially or completely revised, and molecular phylogenetic studies completed by research groups overseas have presented strong evidence supporting straight-forward changes to Australian flora. In this updated checklist, 2790 names of all ranks are included, and 940 taxa, comprising 916 species and 24 infraspecific taxa, are accepted for Australia, including 21 accepted with some doubt. 1372 synonyms are included for taxa at species rank and below based on Australian types, and names described from other countries that were subsequently reported for Australia, but which are no longer accepted. The Australian hornwort and liverwort flora has undergone a net increase of 70 taxa at species rank or below since 2003. That figure, however, does not capture the extent of compositional and taxonomic turnover that has occurred through the last two decades. One hundred and nineteen (14%) of the species listed as accepted for Australia in McCarthy (2003) have since been excluded from the Australian flora. Three other previously accepted species not listed in McCarthy (2003) have also been excluded. These excluded species were reported on the basis of misidentification, or misapplication of names. The corollary is that 191 species have been added to the Australian flora since 2003. Twenty-one of these species and 1 variety, including one exotic species, are reported as new for Australia in this checklist based on recent collections, predominantly from the Wet Tropics Bioregion of north-east Queensland. We reinstate two species from synonymy, and complete lectotypifications for two species, *Isotachis grandis* and *Vandiemenia ratkowskyana*.

Introduction

Since the publication of the *Catalogue of Australian Liverworts and Hornworts* (McCarthy 2003), our understanding of Australia's hornwort and liverwort flora has been refined as a result of collecting effort and study led by a dedicated group of Australian-based researchers. Generally, refinements have been neither straightforward, nor characterised by a linear progression toward a better understanding. McCarthy's (2003) checklist was published at a time when relationships among the major groups of land plants, including the three bryophyte lineages, were unresolved, to the extent

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that a close relationship between ferns and bryophytes was still considered a possibility (see Goffinet 2000 for a review). Molecular phylogenetic studies have since progressed, by the accumulation of molecular sequence data and analytical advances, through a number of working hypotheses for the relationships among the three bryophyte lineages and other land plants, before settling, for the moment, on the current consensus view in which bryophytes are *most likely* monophyletic (Cox et al. 2014; Wickett et al. 2014; Puttick et al. 2018; Sousa et al. 2019, 2020; Leebens-Mack et al. 2019), with mosses and liverworts *almost certainly* sister taxa, as the 'Setaphyta' (Puttick et al. 2018; Sousa et al. 2020), a group long supported by morphological data (Renzaglia et al. 2018) and subsequent phylogenomic investigations (Harris et al. 2022). These insights highlight the sometimes-arbitrary subdivision of plant groups for operational purposes, including the grouping of hornworts and liverworts into a single checklist here.

Early molecular phylogenetic studies of liverwort diversity published up to the turn of the 21st Century (e.g. Lewis et al. 1997) were not regarded as significantly conflicting with the then-accepted classifications based on morphology (Crandall-Stotler & Stotler 2000). The systematic arrangement and circumscription of genera in McCarthy (2003) were both derived from studies entirely based on morphology, as summarised in Crandall-Stotler & Stotler (2000), who presented a classification informed by relationships estimated using a parsimony optimality criterion and morphological character data. However, molecular phylogenetic studies based on more comprehensive sampling, and on multi-marker datasets, demonstrated that inferences of morphological homology, the polarity of character state transformation, and the classifications based on them, were misled repeatedly by the existence of widespread morphological homoplasy, to the extent that even such fundamental groups as the leafy liverworts (subclass Jungermanniidae of Crandall-Stotler & Stotler 2000) and the simple thalloid liverworts (subclass Metzgeriidae of Crandall-Stotler & Stotler 2000) were not monophyletic (Davis 2004; He-Nygren et al. 2004). The problem of morphological homoplasy is now acknowledged as a matter of routine in molecular phylogenetic studies of liverworts (e.g. Bechteler et al. 2023), though revision of the underlying morphological character systems, work that might be expected to refine our understanding of convergent morphologies, has been given less attention. Nevertheless, two decades-worth of molecular phylogenetic studies have now refined our understanding of hornwort and liverwort phylogenetic relationships. The circumscription and composition of suborders (e.g. Shaw et al. 2015), families (e.g. Hentschel et al. 2006), subfamilies (e.g. Cooper et al. 2011), and genera (e.g. Cooper et al. 2012), across hornworts and liverworts, have all been subject to considerable revision as a result.

Some of the most challenging hornwort and liverwort genera in the Australian flora have now been partially or completely revised since McCarthy (2003), including *Bazzania* (Meagher 2020), *Plagiochila* (Renner 2018), *Radula* (Renner et al. 2013a,b,c), and *Riccia* (Cargill et al. 2016, 2021). New species and new records have been published in other genera including *Austroriella* (Cargill & Milne 2013), *Anthoceros* (Cargill & Palson 2021), *Jubula* (Pócs & Cairns 2008) and many other examples. These studies have highlighted many previously overlooked endemics within the Australian liverwort flora, particularly in the Wet Tropics Bioregion of north-eastern Queensland, and in the semi-arid zone of the interior. Many of these endemics had been assumed to be minor morphological variants of widespread Malesian species by Northern Hemisphere bryologists who only had access to herbarium material.

In addition to revisionary studies completed within Australia based on recent field collections, molecular phylogenetic studies completed by research groups overseas have presented strong evidence supporting straight-forward changes to Australian flora, including in *Leptolejeunea* (Shu et al. 2021), *Microlejeunea* (Dong et al. 2013; Zhu & Shu 2018), and *Cheilolejeunea* (Beveridge & Shepherd 2019). Other studies have identified problems in the circumscription of several Australian species which have not yet been fully resolved, including in *Metzgeria* (Bechteler et al. 2021) and *Lejeunea* (Heinrichs et al. 2013).

A final, and significant, factor contributing to our improved understanding of the Australian liverwort flora has been the completion, to date, of three volumes of the Liverwort and Hornwort Flora of New Zealand (Engel & Glenny 2008, 2019a, 2019b). The close biogeographic links between New Zealand and south-east Australia mean the New Zealand Flora treatment has broad applicability to both Australia and New Zealand. Flora authors have been proactive in their confirmation of the New Zealand endemic status for many species previously thought shared between the two countries.

Given the progress made over the past two decades, an updated summary treatment of the Australian hornwort and liverwort flora, that presents the current state of knowledge as captured by the specimen resource held in Australian herbaria and complemented by recent literature, is now warranted. That update is provided by this checklist.

Methods

This checklist includes three elements, 1) a list of species accepted as occurring in Australia and their synonyms; 2) species rejected from the flora since McCarthy's (2003) checklist; and 3) a nomenclator including all species, accepted and synonyms, reported for Australia or based on Australian types, including taxon citation and data cited in the protologue as being original material, and notes. The cut-off for accepting additions and changes to the Australian flora for the purposes of this checklist was the end of December 2023, marking twenty years since the publication of McCarthy (2003), additions and changes made after that date are not included.

The species accepted as occurring in Australia are presented as a linear classification summarising phylogenetic relationships, and as an alphabetical list supported by voucher specimens and literary references for taxonomic status and Australian occurrence. Excluded species, being those rejected from Australia since McCarthy (2003) are presented as a list, whose heading is "Excluded taxa", because it also includes some genera that have been rejected from the Australian flora. This list of excluded taxa follows the list of accepted species, which are presented in the 'Included taxa' list below. Synonyms included in the list of included taxa are those that were either described based on Australian original material or were reported for Australia at a time when they were accepted, or were listed in McCarthy (2003) because their names have been applied to

herbarium specimens of Australian origin. For each species in these three categories, the author citation, place of publication, and basionym protologue are provided. For basionyms, we also quote the original material cited by the describing author from the protologue, and any statements that narrow the specimens that are included in the original material, for protologues we have been able to obtain. The absence of a statement of original material in association with taxa in the lists below is the result of our being unable to inspect the associated protologue for ourselves. Statements narrowing the original material include, for example, those made by Stephani (1906) who, when describing new species of *Lophocolea* stated for each 'Steph. n.sp. Typus in herb. Steph.', a fairly unambiguous statement of type deposition. On the other hand, many authors, including for example Hooker and Taylor (1844), cited no specimens but often identified a geographic origin for the specimens they examined as 'Hab.', including 'Van Diemen's Land', 'Lord Auckland's Islands' and so on, which we interpret as limiting the suite of original material to specimens from those cited locations.

We have chosen to cite original material, rather than 'type' because identification of type elements, and especially holotype and isotype specimens, in literature does not always reflect accurately the status of the specimens concerned under the International Code of Nomenclature (Turland et al. 2018; Renner 2021), in other words, type status is often misinterpreted in primary literature. We therefore leave the resolution of type status to more detailed, dedicated, investigations. For species accepted as occurring in Australia, this checklist provides a reference supporting the generic attribution of those species, and a literature reference and voucher specimen supporting the species' presence in Australia. For these voucher specimens cited in support of each species accepted from Australia, many, but not all, have been examined and determined by the authors of this checklist. For other cited voucher specimens not critically examined by us we have included those determined by recognised experts of the relevant group which, in most cases, are the authors of the references reporting species occurrences in Australia. These authorities include, among others, Grolle and Váňa for Cephaloziinae, Engel for Lophocoleaceae, Hattori and Pócs for Frullaniaceae, and Pócs for *Cololejeunea* and *Colura*.

We provide the states, territories, and offshore islands from which species have been reported, including Lord Howe Island, Norfolk Island, Christmas Island and Macquarie Island (no liverwort taxon is known from Keeling Island). For the reporting of occurrences in states, territories and islands we have relied on publications cited for each species distribution and have complemented those with records from the Australasian Virtual Herbarium. State, Territory, and Island level occurrences are, then, likely to be incomplete to the extent that they overlook specimens not yet on AVH, by virtue of either recency of collection or lack of a digitised record. With regards to state and territory distributions, this checklist will be incomplete. We view the preparation of species lists for each state and territory as a logical next step that builds on this checklist, but which is best undertaken by state and territory herbaria. We decided against repeating verbatim state and territory distributions from McCarthy (2003) for two reasons, firstly, species circumscriptions have changed through time and our purpose is to reflect a current understanding of diversity and distributions, and secondly, McCarthy (2003) was a compilation of other checklists, and this approach is susceptible to inadvertent propagation of error. When voucher specimens are held by international institutions, and no digitised duplicate is held within Australia, the distributional records associated with them may have been overlooked in this list. For some species, no voucher specimen is cited. This is not ideal, but is a reality associated with species reported for Australia based on specimens held overseas, by experts who are also based overseas, in instances where voucher specimens supporting Australian occurrences were not cited. We have accepted records for species in some genera, including especially *Cololejeunea* and *Colura* in the Lejeuneaceae, *Leptoscyphus* and *Heteroscyphus* in the Lophocoleaceae, and Lophoziaceae and Cephaloziaceae, on the authority of the acknowledged global experts in these groups, including Pócs, Engel, and Váňa, when records have been formally published without citation of supporting voucher specimens, and regardless of whether we have been able to trace voucher specimens that are held in Australian herbaria. All species names based on original material from Australia are synonyms of species that are accepted as occurring in Australia, but in at least two instances the origins of type material require further investigation.

The nomenclatural synonyms of accepted species in this checklist are not exhaustive. The homotypic synonyms capture some of the historical generic dispositions and are intended to provide sufficient detail within the checklist that the current generic disposition of species can be related to generic classifications of more recent, rather than more ancient, history. The availability of access to comprehensive nomenclatural databases, in our opinion, reduces the need to include complete synonymy lists for combinations based on a given basionym within this checklist, whose aim is to summarise *current* knowledge of the composition and diversity of the Australian hornwort and liverwort flora based on specimens, rather than comprehensively enumerate *historical* taxonomic activity.

To that end, we take the opportunity presented by this checklist to include 21 species and one variety collected in recent years which have not yet been formally reported in primary literature as occurring in Australia. These new country records are, in the main from the Wet Tropics of north-east Queensland and Lord Howe Island. Those from the Wet Tropics result from recent collecting effort on isolated mountain tops in the north of that bioregion, whose hornwort and liverwort floras have remained relatively poorly studied. These new records include species of Lejeuneaceae and Plagiochilaceae, as would be expected, but also unexpected additions to the Australian flora in Cephaloziaceae and Balantiopsidaceae. We have also taken the opportunity to formally reinstate two other species from the Wet Tropics, *Balantiopsis brotheri* Steph. and *Lepidolejeunea fissistipula* (Steph.) Grolle for reasons noted in association with these taxa in the checklist. For several species, we provide general commentary on circumscription, variable historical treatment, and so forth, to flag these as likely requiring further investigation. We also consider some minor nomenclatural issues that have arisen during the course of compiling this checklist where these were identified.

The other secondary element is the higher classification of the species present in Australia, from family to division. This is based on Crandall-Stotler *et al.* (2009b) and subsequent molecular phylogenetic studies that have further refined our understanding of relationships at generic level and above. There have been many of these, as cited in the checklist, including in Cephaloziinae, Jungermanniinae, Lejeuneaceae, and Plagiochilaceae. In some families, generic circumscriptions in lieu of molecular phylogenetic studies have not yet been fully refined, including and especially Lophocoleaceae and Schistochilaceae. For these families we follow the generic arrangement used by the most recent authoritative treatment of the group, in most cases being the Liverwort and Hornwort Flora of New Zealand (Engel & Glenny 2008, 2019a, 2019b), while acknowledging that the generic placement of many, or most species, is likely to change in the near future. We prefer to exercise strategic lethargy when considering comprehensive changes to generic classifications, especially when initial proposals for nomenclatural change are likely to be subject to further refinement on the basis of new data and more comprehensive and complete sampling of the scrutinised taxa. The problems associated with generic circumscription in Lophocoleaceae, for example, are far from resolved, even by the most recent proposals that acknowledge residual difficulties associated with *Clasmatocolea*. For Pallaviciniaceae, we acknowledge the paraphyly of some genera and the likelihood that refinement to generic circumscription and composition will occur but refrain from adopting recent proposals until a comprehensive reassessment of relationships within this family has been completed, and an enduring generic classification has been derived. Molecular phylogenetic testing of the taxa comprising our higher classification is ongoing, and resolution of generic circumscription in these, and other families, should be anticipated, as covered in the discussion below.

With regards our assessment of evidence for accepting changes to the Australian flora based on published molecular phylogenetic studies that include accessions from Australia, we have incorporated those where evidence in support of taxonomic change is unambiguous, for example in the case of changes to *Leptolejeunea* implicit in Shu et al. (2021). The criteria for accepting changes from studies where the composition of the Australian flora was ancillary to the goal of the study were, in addition to the unambiguity of the result, a clear and definitive claim by relevant taxon experts regarding the identity of the accessions included, preferably in conjunction with an examination of relevant types. Not all studies fulfilled these criteria, so their findings are noted alongside Australian species, again flagging them as requiring further investigation.

Results and Discussion

In this updated checklist, 940 taxa, comprising 916 species and 24 infraspecific taxa are accepted for Australia, including 20 accepted with some doubt. With 916 species, Australia is home to around 12% of global hornwort and liverwort diversity, based on the estimate of global species diversity of around 7,500 liverwort species of von Konrat et al. (2010) and catalogued species diversity of Söderström et al. (2016).

A total of 846 species, including doubtful records, were accepted for Australia by McCarthy (2003), with 23 heterotypic infraspecific taxa whose typical variety also occurred in Australia, taking the total number of Australian taxa to 869. The Australian hornwort and liverwort flora has undergone a net increase of 70 taxa since 2003. That figure, however, does not capture the extent of turnover that has occurred. Since 2003, 119 of the species listed in McCarthy (2003), and three others not listed, have been excluded from Australia, fully 14 percent of the species then comprising the Australian hornwort and liverwort flora. These excluded species had been reported for Australia on the basis of either misidentification or misapplication of names. Since 2003, then, a gross total of 191 taxa have been added to the Australian flora, at an average rate of 9.5 species per annum over two decades. Around one third of those, 63 taxa (59 species and 4 subspecies or varieties) have been newly described based on Australian material over this two-decade period, an average increase in Australian, and global, diversity of three species per annum. The majority of these new species have been described from the Wet Tropics Bioregion of north-eastern Queensland, including 6 new species of *Bazzania* (Meagher 2019), 9 new species of *Plagiochila* (Renner 2018), 8 new species of *Radula* (Renner et al. 2013a, b, c; Renner 2014; Pócs & Renner 2020), and smaller numbers in other genera subject to study and revision by researchers based in Australia and overseas (Pócs & Cairns 2008; Pócs 2020; Renner 2012; Renner & Wilson 2018).

As a result, many species thought widespread throughout tropical Malesia have been excluded from the Australian flora and replaced by Australian endemics. This has not resulted in dramatic increases in the raw diversity of the Australian flora, but it has resulted in the recognition of a distinct endemic component within its wet tropical hornwort and liverwort flora, one with phylogenetic links to both southern temperate Australasia and New Caledonia. Other species-rich genera that may contribute to this endemic element, but which have not been subject to modern revision, include *Lejeunea*, *Cheilolejeunea*, *Metzgeria, Riccardia* and, for the Wet Tropics, *Lepidozia*.

Exploration and documentation of the Arid Biome and Monsoon Tropics Biome hornwort and liverwort floras are in their infancy, which reflects an understandable bias in collecting effort toward 'traditional' hornwort and liverwort habitats, as demonstrated by plots of species richness for bryophytes presented by Stevenson et al. (2012). Collections made in semi-arid Australia during two recent years dominated by La Nina weather have revealed the existence of an ephemeral hornwort flora in the Australian interior (Cargill & Palsson 2022), in addition to a specialised liverwort flora (Cargill & Milne 2013). The lowland monsoon tropics are generally characterised by low biomass, low diversity bryophyte communities, but what diversity has been documented appears to contain a distinct element endemic to that Biome (Renner & Wilson 2018). Further collecting effort targeting hornworts and liverworts across dry and seasonally dry Australia, an area approximately 80% of the continent, is warranted and will undoubtedly further increase the diversity of all three 'bryophyte' (in the very broad sense to include hornworts as well as mosses and liverworts) lineages in the Australian flora.

There is an emerging consensus regarding the composition of and relationships among major lineages of hornworts and liverworts, including among broad-scale phylogenomic studies published since Söderström et al. (2016) These include studies by Dong et al. (2022), Bechteler et al. (2023), and taxon-focused studies employing Sanger sequencing, including Shaw et al.

(2015), Bechteler et al. (2016), Feldberg et al. (2016), Patzak et al. (2017), and Sukkharak & Gradstein (2017). However, there is some disagreement around the rank at which major lineages are best recognised, with many studies following the classification of Crandall-Stotler et al. (2009b), with updates, while a recent phylogenomic study of mosses and liverworts (Bechteler et al. 2023) recognised as orders some taxa previously recognised as suborders, or families. Part of the justification for this elevation was one of equivalence with the depth of phylogenetic divergence among moss orders. While there is merit to time-banding as a component of ranking decisions, whole-scale reconsideration of molecular phylogenetic data in conjunction with morphological data, in particular studies of morphological disparity are yet to be undertaken. Until a new consensus view has been derived, we continue to follow the classification of Crandall-Stotler & Stotler (2009), as adopted by Söderström et al. (2016), acknowledging that further refinement is likely.

Taxa here reported as new for Australia

Acromastigum bancanum (Sande Lac.) A.Evans
Acromastigum echinatiforme (De Not.) A.Evans
Acromastigum stenophyllum R.M.Schust.
Acroscyphella iwatsukii (N.Kitag.) N.Kitag. & Grolle
Anastrophyllopsis revoluta (Steph.) Váňa & L.Söderstr.
Apopellia endiviifolia (Dicks.) Nebel & D.Quandt (exotic)
Calypogeia arguta Nees & Mont.
Cephalozia macgregori (Steph.) Váňa
Heteroscyphus splendens (Lehm. & Lindenb.) Grolle
Lejeunea cocoes Mitt.
Lepicolea attenuata (Mitt.) Steph.
Lepicolea rara (Steph.) Grolle
Lepidozia haskarliana Steph.
Lopholejeunea herzogiana Verd.
Lopholejeunea javanica (Nees) Schiffn.
Plagiochila hampeana Gottsche
Riccardia alba (Colenso) E.A.Br.
Riccardia marginata (Colenso) Pearson
Thysananthus convolutus Lindenb.
Tricholepidozia lindenbergii var. *lindenbergii*
Wettsteinia schusteriana Grolle
Zoopsis argentea var. *flagelliformis* (Colenso) R.M.Schust.

Taxa here reinstated from synonymy

Balantiopsis brotheri Steph.
Lepidolaena fissistipula (Steph.) Grolle

Checklist of hornwort and liverwort taxa recognised in Australia as at 30 December 2023

The families, genera, and species below are accepted for the Australian hornwort and liverwort flora. The arrangement of taxa is linear to reflect relationships resolved by molecular phylogenetic studies over the past twenty years, as described in the discussion. The ordinal classification for liverworts largely follows Crandall-Stotler et al. (2009b), translation from this to the ordinal classification proposed by Bechteler et al. (2023) requires little rearrangement. Numbers in brackets next to the genus name are the number of species accepted for Australia, for easy reference. Names here noted as synonyms are indented under their accepted name and prefaced by '='.

Anthocerotophyta Rothm. ex Stotler & Crand.-Stotl.
Anthocerotopsida de Bary ex Jancz.
Anthocerotidae Rosenvinge corr Proskauer
Anthocerotales Limpr.
Anthocerotaceae Dumort.
Anthoceros L. (6)
Anthoceros apocynon Cargill & Palsson
Anthoceros capricornii Cargill & G.A.M.Scott
Anthoceros fragilis Steph.
=*Anthoceros fertilis* Steph.
Anthoceros palssoniae Cargill
Anthoceros punctatus L.
=*Anthoceros ferdinandi-muelleri* Steph.
Anthoceros wellmanii Cargill
Folioceros D.C.Bhardwaj (2)
Folioceros fuciformis (Mont.) D.C.Bhardwaj
=*Anthoceros fuciformis* Mont.
Folioceros glandulosus (Lehm. & Lindenb.) D.C.Bhardwaj
=*Anthoceros glandulosus* Lehm. & Lindenb.
Dendrocerotidae Duff, J.C.Villarreal, Cargill & Renzaglia
Dendrocerotales Hässel
Dendrocerotaceae (Milde) Hässel
Dendrocerotoideae R.M.Schust.
Dendroceros Nees (7)
Dendroceros australis Steph.
Dendroceros crispatus (Hook.) Nees
=*Monoclea crispata* Hook.
Dendroceros difficilis Steph.
Dendroceros granulatus Mitt.
Dendroceros muelleri Steph.
Dendroceros subtropicus C.J.Wild
Dendroceros wattsianus Steph.
Megaceros Campb. (3)
Megaceros austronesophilus Cargill & Seppelt
Megaceros flagellaris (Mitt.) Steph.
=*Anthoceros flagellaris* Mitt.
Megaceros gracilis (Reichardt) Steph.
=*Anthoceros carnosus* Steph.
=*Anthoceros gracilis* Reichardt
=*Anthoceros longispirus* Carrington & Pearson
=*Megaceros carnosus* (Steph.) Steph.
=*Megaceros crassus* Steph.
Notothylatidae Duff, J.C.Villarreal, Cargill & Renzaglia
Notothyladales Hyvonen & Piippo
Notothyladaceae (Milde) Mull.Frib. ex Prosk.
Notothyladoideae Grolle [subfamily]
Notothylas Sull. ex A.Gray (2)
Notothylas javanica (Sande Lac.) Gottsche
Notothylas orbicularis (Schweinitz) Sullivant in A.Gray
Phaeoceros Prosk. (5)
Phaeoceros carolinianus (Michx.) Prosk.
=*Anthoceros australiae* Beauverd
=*Anthoceros brotheri* Steph.
=*Anthoceros communis* Steph.
=*Anthoceros crispus* Steph.
=*Anthoceros multicapsulus* Steph.
=*Phaeoceros laevis* subsp. *carolinianus* (Michx.) Prosk.
Phaeoceros engelii Cargill & Fuhrer
Phaeoceros evanidus (Steph.) Cargill & Fuhrer
=*Anthoceros evanidus* Steph.
Phaeoceros inflatus (Steph.) Cargill & Fuhrer
=*Anthoceros inflatus* Steph.
Phaeoceros tuberosus (Taylor) Prosk.
=*Anthoceros tuberosus* Taylor
Marchantiophyta Stotler & Crand.-Stotl. [phylum]
Haplomitriopsida Stotler & Crand.-Stotl.
Haplomitriidae Stotler & Crand.-Stotl.
Calobryales Hamlin
Haplomitriaceae Dedecek
Haplomitrium Nees (2)
Haplomitrium gibbsiae (Steph.) R.M.Schust.
=*Calobryum gibbsiae* Steph.
Haplomitrium intermedium Berrie
Treubiidae Stotler & Crand.-Stotl.
Treubiales Schljakov
Treubiaceae Verd.
Treubia K.I.Goebel (2)
Treubia lacunosa (Colenso) Prosk.
=*Noteroclada lacunosa* Colenso
Treubia tasmanica R.M.Schust. & G.A.M.Scott
Marchantiopsida Cronquist, Takht. & W.Zimm.
Marchantiidae Engl.
Lunulariales D.G.Long
Lunulariaceae H.Klinggr.
Lunularia Adans. (1)
Lunularia cruciata (L.) Dumort.
=*Lunularia vulgaris* Micheli ex Raddi
=*Marchantia cruciata* L.
Sphaerocarpales Cavers
Riellaceae Engl.
Austroriella Cargill & Milne (1)
Austroriella salta Milne & Cargill
Riella Mont. (2)
Riella halophila Banwell
Riella spiculata J.Taylor
Sphaerocarpaceae Heeg
Sphaerocarpos Boehm. (1)
Sphaerocarpos texanus Austin

Monocarpaceae D.J.Carr ex Schelpe
Monocarpus D.J.Carr (1)
Monocarpus sphaerocarpus D.J.Carr
Marchantiales Limpr.
Aytoniaceae Cavers
Asterella P.Beauv. (12)
Asterella australis (Hook.f. & Taylor) Verd. ex G.A.M.Scott & J.A.Bradshaw
=*Fimbraria australis* Hook.f. & Taylor
Asterella conocephala (Steph.) R.M.Schust.
=*Fimbraria conocephala* Steph.
Asterella dioica (Steph.) H.A.Mill.
=*Fimbraria dioica* Steph.
Asterella drummondii (Taylor) R.M.Schust. ex D.G.Long
Asterella longebarbata (Steph.) H.A.Mill.
Asterella muelleri (Gottsche ex Steph.) R.M.Schust.
=*Fimbraria muelleri* Gottsche ex Steph.
Asterella setisquama (Steph.) R.M.Schust.
=*Fimbraria setisquama* Steph.
Asterella subplana (Steph.) R.M.Schust.
=*Fimbraria subplana* Steph.
Asterella tasmanica (Steph.) R.M.Schust.
=*Fimbraria tasmanica* Steph.
Asterella tenera (Mitt.) R.M.Schust.
=*Fimbraria tenera* Mitt.
Asterella tenerrima (Steph.) H.A.Mill.
=*Fimbraria tenerrima* Steph.
Asterella whiteleggeana (Steph.) R.M.Schust.
=*Asterella caucasica* (Steph.) H.Buch, A.Evans & Verdoorn
=*Fimbraria caucasica* Steph.
=*Fimbraria whiteleggeana* Steph.
Plagiochasma Lehm. & Lindenb. (1)
Plagiochasma rupestre (J.R.Forst. & G.Forst.) Steph.
=*Aitonia extensa* Steph.
=*Aytonia extensa* Steph.
=*Aytonia rupestris* J.R.Forst. & G.Forst.
=*Plagiochasma australe* Nees
=*Plagiochasma extensum* (Steph.) Steph.
Reboulia Raddi (2)
Reboulia hemisphaerica (L.) Raddi
=*Marchantia hemisphaerica* L.
Reboulia queenslandica (Steph.) M.L.Hicks
=*Plagiochasma queenslandica* Steph.
Cyathodiaceae Stotler & Crand.-Stotl.
Cyathodium Kunze ex Lehm. (1)
Cyathodium cavernarum Kunze ex Lehm.
Marchantiaceae Lindl.
Marchantia L. (4)
Marchantia berteroana Lehm. & Lindenb.
=*Marchantia cephaloscypha* Steph.
=*Marchantia paludicola* Steph.
=*Marchantia tabularis* Nees
Marchantia foliacea Mitt.
=*Marchantia fusca* Steph.
=*Marchantia tasmanica* Steph. ex Bonner
Marchantia pileata Mitt.
=*Marchantia pallida* Steph.
=*Marchantia wattsiana* Steph. ex Bonner
Marchantia polymorpha L.
Marchantia polymorpha var. *aquatica* Nees
Marchantia polymorpha var. *polymorpha*
Dumortieraceae D.G.Long
Dumortiera Nees (1)
Dumortiera hirsuta (Sw.) Nees
=*Marchantia hirsuta* Sw.
Ricciaceae Rchb.
Riccia L. (51)
Riccia acutisulca Steph.
Riccia abdita Cargill
Riccia albida Sull.
Riccia areolata Na-Thalang
Riccia asprella Carrington & Pearson
Riccia atropurpurea Sim.
Riccia billardierei Mont. & Nees
Riccia blackiae Na-Thalang
Riccia cancellata Taylor
Riccia caroliniana Na-Thalang
Riccia cartilaginosa Steph.
=*Riccia marginata* Carrington & Pearson
Riccia cavernosa Hoffm.
=*Ricciella multilamellata* Steph.
Riccia chrysocrinita Cargill
Riccia cincta Jovet-Ast
Riccia collata Na-Thalang
Riccia corrugata Jovet-Ast
Riccia crassa Steph.
Riccia crassivenia Jovet-Ast
Riccia crinita Taylor
=*Riccia longiciliata* Na-Thalang
Riccia crozalsii Levier
Riccia crustata Trab. ex Grolle
Riccia crystallina L.
=*Riccia plana* Taylor
Riccia deserticola Steph.
Riccia duplex Lorb. ex Mull.Frib.
Riccia duplex var. *duplex*
Riccia duplex var. *megaspora* Na-Thalang
=*Riccia multifida* var. *divaricata* Na-Thalang
Riccia eburnea Jovet-Ast
Riccia fluitans L.
Riccia gangetica Ahmad
Riccia inflexa Taylor
=*Riccia punctata* Taylor
Riccia junghuhniana Nees & Lindenb.
Riccia lamellosa Raddi
Riccia luticola Na-Thalang
Riccia macrospora Steph.
Riccia multifida (Steph.) Steph.
=*Ricciella multifida* Steph.
Riccia multifida var. *filiformis* Na-Thalang
Riccia multifida var. *multifida*
=*Riccia burnettensis* Steph.
Riccia multifida var. *torticolla* Na-Thalang
Riccia muscicola Steph.

Riccia nigrella DC.
Riccia obchantiana Cargill
Riccia olgensis Na-Thalang
Riccia papulosa (Steph.) Steph.
=*Ricciella papulosa* Steph.
Riccia papulosa var. *papulosa*
Riccia papulosa var. *variabilis* Na-Thalang
Riccia perthiana Steph. ex K.I.Goebel
Riccia porosa Taylor
Riccia pullulans Jovet-Ast
Riccia rorida Na-Thalang
Riccia rubrispora Steph.
Riccia singularis Jovet-Ast
Riccia sorocarpa Bisch.
Riccia spongiosula Na-Thalang
Riccia subbifurca Warnst. ex Croz.
=*Riccia bifurca* Hoffm.
Riccia tasmanica Steph. ex Rodway
Riccia victoriensis Steph.
Riccia weymouthiana Steph. ex Rodway
Ricciocarpos Corda (1)
Ricciocarpos natans (L.) Corda
=*Riccia natans* L.
Targioniaceae Dumort.
Targionia L. (2)
Targionia hypophylla L.
=*Targionia michelii* Corda
Targionia lorbeeriana Müll. Frib.
Pelliidae Haekel
Pelliales He-Nygren, Juslen, Ahonen, Glenny & Piipo
Pelliaceae H.Klinggr.
Apopellia (Grolle) Nebel & D.Quandt (1)
Apopellia endiviifolia (Dicks.) Nebel & D. Quandt
Fossombroniales Schljakov
Fossombroniineae R.M.Schust. ex Stotler & Crand.-Stotl.
Fossombroniaceae Hazsl.
Fossombronia Raddi (34)
=*Austrofossombronia* R.M.Schust.
Fossombronia alata G.A.M.Scott & D.C.Pike
Fossombronia altilamellosa G.A.M.Scott & D.C.Pike ex Cargill
Fossombronia areolata G.A.M.Scott & D.C.Pike
Fossombronia auricolor G.A.M.Scott & D.C.Pike ex Cargill
Fossombronia australis Mitt.
=*Austrofossombronia australis* (Mitt.) R.M.Schust.
=*Fossombronia naumannii* Schiffn.
Fossombronia bracchia Cargill
Fossombronia caespitiformis De Not. ex Rabenh.
Fossombronia caespitiformis subsp. *caespitiformis*
Fossombronia cerebriformis G.A.M.Scott & D.C.Pike
Fossombronia cultriformis G.A.M.Scott & D.C.Pike
Fossombronia densa G.A.M.Scott & D.C.Pike
Fossombronia dentata Steph.
=*Fossombronia dentata* f. dentata
Fossombronia fuhreri G.A.M.Scott & D.C.Pike
Fossombronia grossepapillata Steph.
Fossombronia hewsoniae G.A.M.Scott & D.C.Pike
Fossombronia integrifolia Steph.
Fossombronia intestinalis Taylor
Fossombronia laciniata G.A.M.Scott & D.C.Pike
Fossombronia magnaspora G.A.M.Scott & D.C.Pike ex Cargill
Fossombronia maritima (Paton) Paton
Fossombronia microlamellata G.A.M.Scott & D.C.Pike
Fossombronia papillata Steph.
Fossombronia pseudointestinalis Cargill
Fossombronia punctata G.A.M.Scott & D.C.Pike
Fossombronia purpureospora G.A.M.Scott & D.C.Pike ex Cargill
Fossombronia pusilla (L.) Nees
=*Fossombronia perpusilla* (Col.) Steph.
=*Fossombronia pusilla* var. *pusilla*
=*Jungermannia pusilla* L.
Fossombronia ruminata Cargill
=*Fossombronia maritima* G.A.M.Scott & D.C.Pike
=*Fossombronia* sp.Nelson (B.Fuhrer&D.C.Pike s.n.,15 Sept.1984) Cargill
Fossombronia rupestris G.A.M.Scott & D.C.Pike ex Cargill
Fossombronia scrobiculata G.A.M.Scott & D.C.Pike
Fossombronia subsaccata Steph.
Fossombronia tesselata G.A.M.Scott & D.C.Pike
Fossombronia truncata G.A.M.Scott & D.C.Pike ex Cargill
Fossombronia vermiculata G.A.M.Scott & D.C.Pike
Fossombronia wattsii Steph.
Fossombronia wondraczekii (Corda) Dumort. ex Lindb.
=*Fossombronia forsythii* Steph.
=*Jungermannia wondraczekii* Corda
Petalophyllaceae Stotler & Crand.-Stotl.
Petalophyllum Nees & Gottsche ex Lehm. (1)
Petalophyllum preissii Lehm.
Pallaviciniales W.Frey & M.Stech
Pallaviciniineae R.M.Schust.
Hymenophytaceae R.M.Schust.
Hymenophyton Dumort. (2)
Hymenophyton flabellatum (Labill.) Dumort. ex Trevis.
=*Jungermannia flabellata* Labill.
=*Umbraculum muelleri* Gottsche
Hymenophyton leptopodum (Hook.f. & Taylor) A.Evans
=*Jungermannia leptopoda* Hook.f. & Taylor
Pallaviciniaceae Mig.
Seppeltia Grolle (1)
Seppeltia succuba Grolle
Pallavicinia Gray (4)
Pallavicinia lyellii (Hook.) Gray
=*Jungermannia lyellii* Hook.
Pallavicinia lyellii var. *lyellii*
Pallavicinia purpurea Steph.
Pallavicinia rubristipa Schiffn.
Pallavicinia xiphoides (Hook.f. & Taylor) Trevis.
=*Blyttia spinosa* Gottsche
=*Jungermannia xiphoides* Hook.f. & Taylor
Podomitrium Mitt. (1)
Podomitrium phyllanthus (Hook.) Mitt.
=*Jungermannia cladorrhizans* Hook.f. & Taylor
=*Jungermannia phyllanthus* Hook.
=*Pallavicinia campanulata* Steph.

Symphyogyna Nees & Mont. (8)
Symphyogyna hymenophyllum (Hook.) Nees & Mont.
=*Jungermannia hymenophyllum* Hook.
Symphyogyna interrupta Carrington & Pearson
Symphyogyna irregularis Steph.
Symphyogyna lacerosquama Steph.
Symphyogyna multiflora Steph.
Symphyogyna podophylla (Thunb.) Mont. & Nees
=*Jungermannia obovata* Hook.f. & Taylor
=*Jungermannia podophylla* Thunb.
=*Jungermannia rhizobola* Schwägr.
=*Symphyogyna pulchra* Taylor
Symphyogyna rhodina (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees
=*Jungermannia rhodina* Hook.f. & Taylor
Symphyogyna semi-involucrata Austin
Metzgeriidae Barthol.-Began
Pleuroziales Schljakov
Pleuroziaceae Mull.Frib.
Pleurozia Dumort. (1)
Pleurozia articulata (Lindb.) Schiffn.
=*Physiotium articulatum* Lindb.
=*Physiotium muelleri* Gottsche ex J.B.Jack
=*Pleurozia ferdinandi-muelleri* Steph.
=*Pleurozia muelleri* (Gott. ex Jack) Steph.
Metzgeriales Chalaud
Metzgeriaceae H.Klinggr.
Metzgeria Raddi (15)
Metzgeria australis Steph.
Metzgeria consanguinea Schiffn.
Metzgeria crassipilis (Lindb.) A.Evans
=*Metzgeria furcata* subsp. *crassipilis* Lindb.
Metzgeria densiseta Steph.
Metzgeria flavovirens Colenso
Metzgeria francana Steph.
Metzgeria furcata (L.) Dumort.
=*Jungermannia furcata* L.
=*Metzgeria decipiens* (C.Massal.) Schiffn.
=*Metzgeria furcata* subsp. *furcata*
=*Metzgeria furcata* var. *decipiens* C.Massal.
=*Metzgeria furcata* var. *furcata*
=*Metzgeria glaberrima* Steph.
=*Metzgeria grollei* Kuwah.
=*Metzgeria pinnata* Steph.
Metzgeria hebridensis Steph.
Metzgeria howeana Steph.
Metzgeria leptoneura Spruce
=*Metzgeria antarctica* Steph. & Watts
=*Metzgeria atrichoneura* Spruce
=*Metzgeria colensoi* Steph.
=*Metzgeria concavula* Pearson
=*Metzgeria hamata* Lindb.
Metzgeria lindbergii Schiffn.
=*Metzgeria pectinata* Steph.
Metzgeria nitida Mitt.
Metzgeria rigida Lindb.
=*Metzgeria crassicostata* Steph.
=*Metzgeria wattsiana* Steph.
Metzgeria saccata Mitt.
Metzgeria submarginata M.L.So
Vandiemeniaceae Hewson
Vandiemenia Hewson (1)
Vandiemenia ratkowskyana Hewson
Aneuraceae H.Klinggr.
Aneura Dumort. (2)
Aneura eachamensis Hewson
Aneura rodwayi Hewson
Lobatiriccardia (Mizut. & S.Hatt.) Furuki (2)
=*Riccardia* (*Lobatiriccardia*) Mizut. & S.Hatt.
Lobatiriccardia alterniloba (Hook.f. & Taylor) Furuki
=*Aneura alterniloba* (Hook.f. & Taylor) Taylor & Hook.f.
=*Jungermannia alterniloba* Hook.f. & Taylor
Lobatiriccardia alterniloba var. *gigantea* (Steph.) Nebel
=*Aneura alterniloba* var. *gigantea* (Steph.) Hewson
=*Aneura gigantea* Steph.
Lobatiriccardia alterniloba var. *robusta* (Rodway) Nebel
=*Aneura alterniloba* f. *robusta* Rodway
=*Aneura alterniloba* var. *robusta* (Rodway) Hewson
Lobatiriccardia athertonensis (Hewson) Furuki
=*Aneura athertonensis* Hewson
Riccardia Gray (24)
Riccardia aequicellularis (Steph.) Hewson
=*Aneura aequicellularis* Steph.
=*Aneura filiformis* Steph.
=*Riccardia reducta* R.M.Schust.
Riccardia alba (Colenso) E.A.Br.
=*Aneura alba* Colenso
Riccardia alcicornis (Hook.f. & Taylor) Trevis.
=*Aneura alcicornis* (Hook.f. & Taylor) Gottsche
=*Jungermannia alcicornis* Hook.f. & Taylor
=*Sarcomitrium alcicorne* (Hook.f. & Taylor) Mitt.
Riccardia australis (Lehm.) Hewson
=*Sarcomitrium australe* Lehm.
Riccardia babindae Hewson
Riccardia bipinnatifida (Colenso) Hewson
=*Aneura bipinnatifida* Colenso
=*Aneura polymorpha* Colenso
Riccardia bliklika Hewson
Riccardia bliklika var. *bliklika*
Riccardia browniae A.Hagborg & L.Söderstr.
=*Aneura pusilla* Steph.
=*Riccardia pusilla* (Steph.) E.A.Br.
Riccardia cochleata (Hook.f. & Taylor) Kuntze
=*Aneura cochleata* (Hook.f. & Taylor) Hook.f.
=*Aneura erecta* Steph.
=*Aneura lichenoides* Steph.
=*Riccia cochleata* Hook.f. & Taylor
=*Sarcomitrium cochleatum* (Hook.f. & Taylor) Kuntze
Riccardia colensoi (Steph.) W.Martin
=*Aneura colensoi* Steph.
=*Aneura tasmanica* Steph.
Riccardia crassa (Schwägr.) C.Massal.
=*Aneura coriacea* Steph.
=*Aneura crassa* (Schwägr.) Nees

=*Aneura longiflora* f. *submersa* Rodway
=*Aneura rufescens* Steph.
=*Aneura spathuliloba* Steph.
=*Aneura stolonifera* Steph.
=*Aneura walesiana* Steph.
=*Jungermannia crassa* Schwägr.
=*Riccardia crassa* (Schwägr.) Carrington & Pearson
=*Riccardia stolonifera* (Steph.) E.A.Hodgs.
=*Sarcomitrium crassum* (Schwägr.) Mitt.
Riccardia eriocaula (Hook.) Besch. & C.Massal.
=*Jungermannia eriocaula* Hook.
Riccardia gracilis (Steph.) R.M.Schust.
=*Aneura gracilis* Steph.
Riccardia graeffei (Steph.) Hewson
=*Aneura graeffei* Steph.
Riccardia hypipamensis Hewson
Riccardia lobulata (Colenso) E.A.Hodgs.
=*Aneura minima* (Carrington & Pearson) Steph.
=*Riccardia minima* Carrington & Pearson
=*Zoopsis lobulata* Colenso
Riccardia longiflora (Steph.) Hewson
=*Aneura longiflora* f. *longiflora*
=*Aneura longiflora* Steph.
Riccardia macdonaldiana Hewson
Riccardia marginata (Colenso) Pearson
=*Aneura marginata* Colenso
=*Aneura muscoides* Colenso
=*Riccardia muscoides* (Colenso) E.A.Hodgs.
Riccardia multifida (L.) Gray
=*Jungermannia multifida* L.
Riccardia nitida (Colenso) E.A.Hodgs.
=*Aneura nitida* Colenso
Riccardia prehensilis (Hook.f. & Taylor) C.Massal.
=*Jungermannia prehensilis* Hook.f. & Taylor
Riccardia rupicola (Steph.) Hewson
=*Aneura rupicola* Steph.
Riccardia wattsiana (Steph.) Hewson
=*Aneura wattsiana* Steph.

Jungermanniopsida Stotler & Crand.-Stotl.
Jungermanniidae Engl.
Jungermanniales H.Klinggr.
Perssoniellineae R.M.Schust.
Schistochilaceae H.Buch
Gottschea Nees ex Mont. (7)
=*Paraschistochila* R.M.Schust.
Gottschea aligera (Nees & Blume) Nees
=*Paraschistochila aligera* (Nees & Blume) R.M.Schust.
=*Schistochila aligera* (Nees & Blume) J.B.Jack & Steph.
Gottschea brotheri (Steph.) Grolle & Zijlistra
=*Schistochila brotheri* Steph.
Gottschea isotachyphylla (J.J.Engel & R.M.Schust.) J.J.Engel
=*Paraschistochila isotachyphylla* J.J.Engel & R.M.Schust.
=*Schistochila isotachyphylla* (J.J.Engel & R.M.Schust.) Xiao L.He & Glenny
Gottschea lacerata (Steph.) Grolle & Zijlistra
=*Paraschistochila lacerata* (Steph.) R.M.Schust.
=*Schistochila lacerata* Steph.
Gottschea philippinensis Mont.
=*Paraschistochila philippensis* R.M.Schust.
=*Paraschistochila philippinensis* (Mont.) R.M.Schust.
=*Schistochila philippinensis* (Mont.) J.B.Jack & Steph.
=*Schistochila philippinensis* (Nees & Mont.) Steph.
Gottschea pinnatifolia (Hook.) Nees
=*Jungermannia ciliigera* Hook.f. & Taylor
=*Jungermannia pinnatifolia* Hook.
=*Schistochila pinnatifolia* (Hook.) Trevis.
Gottschea tuloides (Hook.f. & Taylor) Gottsche, Lindenb. & Nees
=*Jungermannia tuloides* Hook.f. & Taylor
=*Paraschistochila tuloides* (Hook.f. & Taylor) R.M.Schust.
=*Schistochila fragilis* Steph.
=*Schistochila tuloides* (Hook.f. & Taylor) Steph.
Pachyschistochila R.M.Schust. & J.J.Engel (4)
Pachyschistochila altissima (E.A.Hodgs.) R.M.Schust. & J.J.Engel
=*Schistochila altissima* E.A.Hodgs.
Pachyschistochila altissima subsp. *altissima*
=*Schistochila altissima* subsp. *altissima*
Pachyschistochila parvistipula (Rodway) R.M.Schust. & J.J.Engel
=*Schistochila parvistipula* Rodway
Pachyschistochila succulenta J.J.Engel & R.M.Schust.
=*Schistochila succulenta* (J.J.Engel & R.M.Schust.) Xiao L.He & Glenny
Pachyschistochila trispiralis (R.M.Schust.) R.M.Schust. & J.J.Engel
=*Schistochila trispiralis* R.M.Schust.
Schistochila Dumort. (6)
Schistochila baileyana Steph.
Schistochila balfouriana (Hook.f. & Taylor) Steph.
=*Jungermannia balfouriana* Hook.f. & Taylor
Schistochila cristata Steph.
Schistochila lehmanniana (Lindenb.) Carrington & Pearson
=*Gottschea hombroniana* Mont.
=*Jungermannia lehmanniana* Lindenb.
Schistochila pseudociliata R.M.Schust.
Schistochila tasmanica Steph.
Cephaloziineae Schljakov
Adelanthaceae Grolle
Adelanthus Mitt. (3)
=*Calyptrocolea* R.M.Schust.
Adelanthus falcatus (Hook.) Mitt.
=*Calyptrocolea falcata* (Hook.) R.M.Schust.
=*Jungermannia falcata* Hook.
=*Plagiochila falcata* (Hook.) Gottsche, Lindenb. & Nees
Adelanthus gemmiparus (R.M.Schust.) E.A.Hodgs.
=*Calyptrocolea gemmipara* R.M.Schust.
Adelanthus occlusus (Hook.f. & Taylor) Carrington
=*Jungermannia occlusa* Hook.f. & Taylor
Cuspidatula Steph. (1)
Cuspidatula monodon (Taylor ex Lehm.) Steph.
=*Jamesoniella monodon* (Taylor ex Lehm.) N.Kitag.
=*Jungermannia* contracta var. *novae-hollandiae* Gottsche ex Nees
=*Jungermannia monodon* var. *fraseri* Gottsche

=*Jungermannia monodon* var. *muelleri* Gottsche

=*Jungermannia monodon* Taylor ex Lehm.

Pseudomarsupidium Herzog (1)

Pseudomarsupidium piliferum (Steph.) Herzog ex Grolle

=*Adelanthus bisetulus* (Steph.) Grolle

=*Adelanthus humilis* Steph.

=*Marsupidium piliferum* Steph.

=*Tylimanthus bisetulus* Steph.

Syzygiella Spruce (4)

=*Cryptochila* R.M.Schust.

=*Jamesoniella* (Spruce) Carrington

=*Jungermannia* (Jamesoniella) Spruce [subgenus]

Syzygiella colorata (Lehm.) Feldberg, Váňa, Hentsche & Heinrichs

=*Jamesoniella colorata* (Lehm.) Spruce ex Schiffn.

=*Jungermannia colorata* Lehm.

Syzygiella sonderi (Gottsche) Feldberg, Váňa, Hentsche & Heinrichs

=*Cryptochila grandiflora* (Lindenb. & Gottsche) Grolle

=*Jungermannia grandiflora* Lindenb. & Gottsche

=*Jungermannia sonderi* Gottsche

Syzygiella tasmanica (Hook.f. & Taylor) K.Feldberg, Váňa, Hentschel & Heinrichs

=*Jamesoniella cambewarrana* Steph.

=*Jamesoniella robusta* Steph.

=*Jamesoniella stephaniana* Beauverd

=*Jamesoniella tasmanica* (Hook.f. & Taylor) Steph.

=*Jungermannia revolvens* Hook.f. & Taylor

=*Jungermannia tasmanica* Hook.f. & Taylor

=*Leioscyphus heterophyllus* Steph.

=*Plagiochila carnosa* Herzog

Syzygiella teres (Carrington & Pearson) Váňa

=*Herzogobryum teres* (Carrington & Pearson) Grolle

Wettsteinia Schiffn. (2)

Wettsteinia inversa (Sande Lac.) Schiffn.

=*Plagiochila inversa* Sande Lac.

Wettsteinia schusteriana Grolle

Anastrophyllaceae L.Söderstr., De Roo & Hedd.

Anastrophyllopsis (R.M.Schust.) Váňa & L.Söderstr. (2)

=*Anastrophyllum* sect. *Anastrophyllopsis* R.M.Schust.

Anastrophyllopsis revoluta (Steph.) Váňa & L.Söderstr.

=*Anastrophyllum revolutum* Steph.

Anastrophyllopsis subcomplicata (Lehm. & Lindenb.) Váňa & L.Söderstr.

=*Anastrophyllum schismoides* var. *crassulum* J.J.Engel

=*Anastrophyllum schismoides* var. *schismoides*

=*Anastrophyllum schismoides* (Mont.) Steph.

=*Jungermannia schismoides* Mont.

=*Jungermannia subcomplicata* Lehm. & Lindenb.

Anastrophyllum (Spruce) Steph. (1)

=*Jungermannia* (*Anastrophyllum*) Spruce

Anastrophyllum piligerum (Nees) Steph.

=*Jungermannia piligera* Nees

Schizophyllopsis Váňa & L.Söderstr. (1)

Schizophyllopsis bidens (Reinw., Blume & Nees) Váňa & L.Söderstr.

=*Anastrophyllum bidens* (Reinw., Blume & Nees) Steph.

=*Jungermannia bidens* Reinw., Blume & Nees

Cephaloziaceae Mig.

Cephalozia (Dumort.) Dumort. (1)

=*Metahygrobiella* R.M.Schust.

Cephalozia macgregori (Steph.) Váňa

=*Hygrobiella macgregori* Steph.

=*Metahygrobiella macgregori* (Steph.) R.M.Schust.

Nowellia Mitt. (2)

Nowellia curvifolia (Dicks.) Mitt.

=*Jungermannia curvifolia* Dicks.

Nowellia langii Pears.

Cephaloziellaceae Douin

=Chonecoleaceae R.M.Schust. ex Grolle

Allisoniella E.A.Hodgs. (2)

Allisoniella nigra (Rodway) R.M.Schust.

=*Cephaloziella nigra* (Rodway) Grolle

=*Sphenolobus niger* Rodway

=*Sphenolobus nigrus* Rodway

Allisoniella nigra subsp. *nigra*

Allisoniella tasmanica R.M.Schust.

Cephalomitrion R.M.Schust. (1)

Cephalomitrion aterrimum (Steph.) R.M.Schust.

=*Cephalozia aterrima* Steph.

=*Herzogobryum filarium* Grolle

Cephaloziella (Spruce) Schiffn. (8)

Cephaloziella arenaria (Steph.) R.M.Schust.

=*Cephalozia arenaria*

Cephaloziella exiliflora (Taylor) Douin

=*Cephaloziella exiliflora* var. *exiliflora*

=*Jungermannia bastovii* Carrington & Pearson

=*Jungermannia exiliflora* Taylor

Cephaloziella hirta (Steph.) R.M.Schust.

=*Cephalozia hirta* Steph.

Cephaloziella levieri (Steph.) Schiffn. ex Douin

Cephaloziella muelleriana R.M.Schust.

Cephaloziella pulcherrima R.M.Schust.

Cephaloziella pulcherrima subsp. *sphagnicola* R.M.Schust.

Cephaloziella squarrosula Steph.

=*Cephalozia levieri* Steph.

=*Cephalozia squarrosula* Trevis.

=*Jungermannia squarrosula* Taylor

=*Jungermannia squarrosula* Taylor

Cephaloziella varians (Gottsche) Steph.

=*Jungermannia varians* Gottsche

Cephaloziella varians subsp. *subantarctica* (R.M.Schust.) R.M.Schust. ex J.J.Engel

=*Cephaloziella arctica* subsp. *subantarctica* R.M.Schust.

Chonecolea Grolle (1)

Chonecolea doellingeri (Nees) Grolle

=*Jungermannia doellingeri* Nees

Cylindrocolea R.M.Schust. (1)

Cylindrocolea kiaeri (Austin) Váňa

=*Cephaloziella kiaeri* (Austin) Douin

Herzogobryum Grolle (1)

Herzogobryum atrocapillum (Hook.f. & Taylor) Grolle

=*Gymnomitrion atrocapillum* Hook.f. & Taylor

Nothogymnomitrion R.M.Schust. (1)

Nothogymnomitrion erosum (Carrington & Pearson) R.M.Schust.

=*Cesia erosa* Carrington & Pearson

=*Cesia stygia* var. *denticulata* Berggr.

Jamesoniellaceae He-Nygren, Juslen, Ahonen, Glenny & Piipo

Denotarisia Grolle (1)

Denotarisia linguifolia (De Not.) Grolle

=*Plagiochila linguifolia* De Not.

Scapaniaceae Mig.

Andrewsianthus R.M.Schust. (4)

Andrewsianthus bidens (Mitt. ex Steph.) R.M.Schust.

=*Lophozia bidens* Mitt. ex Steph.

Andrewsianthus marionensis (S.W.Arnell) Grolle

=*Andrewsianthus cuspidatus* R.M.Schust.

=*Cephalolobus squarrosus* R.M.Schust.

=*Lophozia marionensis* S.W.Arnell

Andrewsianthus perigonialis (Hook.f. & Taylor) R.M.Schust.

=*Jungermannia perigonialis* Hook.f. & Taylor

=*Jungermannia stygia* Hook.f. & Taylor

=*Sphenolobus perigonialis* f. *perigonialis*

=*Sphenolobus perigonialis* f. *submersus* Rodway

Andrewsianthus puniceus (Nees) R.M.Schust. ex Grolle

=*Jungermannia punicea* Nees

Chaetophyllopsis R.M.Schust. (1)

Chaetophyllopsis whiteleggei (Carrington & Pearson) R.M.Schust.

=*Jungermannia whiteleggei* Carrington & Pearson

Chandonanthus Mitt. (1)

Chandonanthus squarrosus (Menzies ex Hook.) Mitt.

=*Anastrophyllum tasmanicum* Rodway

=*Jungermannia squarrosa* Menzies ex Hook.

Diplophyllum (Dumort.) Dumort. (6)

=*Jungermannia* sect. *Diplophyllum* Dumort.

Diplophyllum androgynum J.J.Engel & G.L.Merr.

Diplophyllum angustifolium J.J. Engel & G.L.Merr.

Diplophyllum dioicum R.M.Schust.

Diplophyllum incrassatum J.J.Engel & G.L.Merr.

Diplophyllum obtusifolium (Hook.) Dumort.

=*Jungermannia obtusifolia* Hook.

Diplophyllum obtusifolium subsp. *domesticum* (Gottsche) Váňa

=*Diplophyllum domesticum* var. *domesticum*

=*Diplophyllum domesticum* (Gottsche) Steph.

=*Diplophyllum marionense* S.W.Arnell

=*Jungermannia domestica* Gottsche

Diplophyllum verrucosum R.M.Schust.

Plicanthus R.M.Schust. (1)

Plicanthus hirtellus (F.Weber) R.M.Schust.

=*Jungermannia hirtella* F.Weber

Protolophozia (R.M.Schust.) Schljakov (3)

=*Lophozia* (*Protolophozia*) R.M.Schust.

Protolophozia androgyna R.M.Schust. ex Váňa & L.Söderstr.

Protolophozia herzogiana (E.A.Hodgs. & Grolle) Váňa & L.Söderstr.

=*Lophozia herzogiana* E.A.Hodgs. & Grolle

Protolophozia tasmanica (R.M.Schust.) Váňa & L.Söderstr.

=*Lophozia tasmanica* R.M.Schust.

Scapania (Dumort.) Dumort. (1)

=*Radula* sect. *Scapania* Dumort.

Scapania ampliata Steph.

Scapania ampliata subsp. *queenslandica* M.L.Hicks

Jungermanniineae R.M.Schust. ex Stotler & Crand.-Stotl.

Acrobolbaceae E.A.Hodgs.

Acrobolbus Nees (10)

=*Marsupidium* Mitt.

=*Tylimanthus* Mitt.

Acrobolbus cinerascens (Lehm. & Lindenb.) Bastow

=*Jungermannia cinerascens* Lehm. & Lindenb.

Acrobolbus cinerascens var. *cinerascens*

Acrobolbus concinnus (Mitt.) Grolle

=*Alicularia tenella* Rodway

=*Gymnanthe concinna* Mitt.

=*Symphyomitra weymouthii* Pearson

Acrobolbus epiphytus (Colenso) Briscoe

=*Marsupidium epiphytum* Colenso

=*Plagiochila serrifolia* Steph.

Acrobolbus knightii (Mitt.) Briscoe

=*Marsupidium knightii* Mitt.

Acrobolbus ochrophyllus (Hook.f. & Taylor) R.M.Schust.

=*Jungermannia ochrophylla* Hook.f. & Taylor

Acrobolbus pseudosaccatus (Grolle) Briscoe

=*Tylimanthus pseudosaccatus* Grolle

Acrobolbus setulosus (Mitt.) Briscoe

=*Gymnanthe setulosa* Mitt.

=*Marsupidium setulosum* (Mitt.) Mitt.

Acrobolbus spinifolius R.M.Schust.

Acrobolbus surculosus (Nees) Trevis.

=*Jungermannia abbreviata* Hook.f. & Taylor

=*Marsupidium surculosum* (Nees) Schiffn.

=*Scapania surculosa* Nees

Acrobolbus tenellus (Taylor ex Lehm.) Trevis.

=*Gymnanthe tenella* Taylor ex Lehm.

=*Jungermannia tenella* (Taylor ex Lehm.) Hook.f. & Taylor

=*Tylimanthus flaccidus* Berggr.

=*Tylimanthus tenellus* (Taylor ex Lehm.) Mitt.

=*Tylimanthus viridis* Mitt.

Acrobolbus tenellus var. *diversifolius* (E.A.Hodgs.) Briscoe

=*Tylimanthus diversifolius* E.A.Hodgs.

Acrobolbus tenellus var. *tenellus*

Conoscyphus Mitt. (1)

Conoscyphus trapezioides (Sande Lac.) Schiffn.

=*Chiloscyphus trapezioides* Sande Lac.

Enigmella G.A.M.Scott & K.G.Beckm. (1)

Enigmella thallina G.A.M.Scott & K.G.Beckm.

Goebelobryum Grolle (3)

Goebelobryum grossitextum (Steph.) Grolle

=*Acrobolbus cyaneus* Herzog

=*Marsupidium grossitextum* Steph.

Goebelobryum unguiculatum (Hook.f. & Taylor) Grolle

=*Jungermannia unguiculata* Hook.f. & Taylor

Goebelobryum vermiculare J.J.Engel & Glenny

Lethocolea Mitt. (1)

Lethocolea pansa (Taylor) G.A.M.Scott & K.G.Beckm.

=*Gymnanthe drummondii* Mitt.

=*Jungermannia pansa* Taylor

=*Podanthe squamata* Taylor

Saccogynidium Grolle (2)

Saccogynidium decurvum (Mitt.) Grolle

=*Chiloscyphus asperrimus* Steph.

=*Lophocolea decurva* Mitt.

Saccogynidium muricellum (De Not.) Grolle

=*Chiloscyphus muricellus* De Not.

Arnelliaceae Nakai

Gongylanthus Nees (1)

Gongylanthus scariosus (Lehm.) Steph.

=*Jungermannia scariosa* Lehm.

Balantiopsidaceae H.Buch

Acroscyphella N.Kitag. & Grolle (2)

=*Acroscyphus* N.Kitag.

=*Austroscyphus* R.M.Schust.

Acroscyphella iwatsukii (N.Kitag.) N.Kitag. & Grolle

=*Acroscyphus iwatsukii* N.Kitag.

Acroscyphella phoenicorhiza (Grolle) N.Kitag. & Grolle

=*Neesioscyphus phoenicorhizus* Grolle

Balantiopsis Mitt. (4)

Balantiopsis brotheri Steph.

Balantiopsis convexiuscula Berggr.

=*Balantiopsis aequiloba* Berggr.

Balantiopsis diplophylla (Hook.f. & Taylor) Mitt.

=*Balantiopsis decurrens* Steph.

=*Balantiopsis diplophylla* f. *diplophylla*

=*Balantiopsis diplophylla* f. *paucidentata* Rodway

=*Balantiopsis diplophylla* var. *diplophylla*

=*Balantiopsis diplophylla* var. *kirtonii* Steph.

=*Balantiopsis kingwella* Steph.

=*Balantiopsis pusilla* Steph.

=*Balantiopsis subkingwella* Steph.

=*Balantiopsis wattsiana* Steph.

=*Isotachis pusilla* Steph.

=*Jungermannia diplophylla* Hook.f. & Taylor

Balantiopsis tumida Berggr.

Eoisotachis R.M.Schust. (1)

Eoisotachis nigella (Herzog) R.M.Schust.

=*Isotachis nigella* Herzog

Isotachis Mitt. (5)

Isotachis grandis Carrington & Pearson

Isotachis intortifolia (Hook.f. & Taylor) Gottsche

=*Isotachis gunniana* Mitt.

=*Isotachis inflexa* Gottsche

=*Isotachis terricola* Steph.

=*Jungermannia intortifolia* Hook.f. & Taylor

=*Jungermannia multipenna* Hook.f. & Taylor

Isotachis hastatistipula (Steph.) J.J.Engel

=*Balantiopsis hastatistipula* Steph.

Isotachis montana Colenso

Isotachis riparia Rodway

Blepharidophyllaceae R.M.Schust. ex J.J.Engel

Blepharidophyllum Angstr. (1)

Blepharidophyllum vertebrale (Gottsche) Angstr. ex C.Massal.

=*Scapania vertebralis* Gottsche

Clandarium (Grolle) R.M.Schust. (1)

=*Blepharidophyllum* (*Clandarium*) Grolle

Clandarium xiphophyllum (Grolle) R.M.Schust.

=*Blepharidophyllum xiphophyllum* Grolle

=*Diplophyllum densifolium* f. *decurvum* Rodway

Calypogeiaceae Arnell

Calypogeia Raddi (2)

Calypogeia arguta Nees & Mont.

Calypogeia sphagnicola (Arnell & J.Perss.) Warnst. & Loeske

=*Calypogeia tasmanica* Rodway

=*Kantius sphagnicola* Arnell & J.Perss.

Mnioloma Herzog (2)

Mnioloma fuscum (Lehm.) R.M.Schust.

=*Jungermannia fusca* Lehm.

Mnioloma stamatotonum M.A.M.Renner & E.A.Br.

Geocalycaceae H.Klinggr.

Geocalyx Nees (1)

Geocalyx caledonicus Steph.

=*Chiloscyphus montanus* Steph.

Gymnomitriaceae H.Klinggr.

Gymnomitrion Corda (1)

Gymnomitrion incompletum (Gottsche) R.M.Schust.

=*Jungermannia incompleta* Gottsche

Marsupella Dumort. (1)

Marsupella sparsifolia (Lindb.) Dumort.

=*Sarcoscyphus sparsifolius* Lindb.

Marsupella sparsifolia subsp. *childii* R.M.Schust. ex Váňa & L. Söderstr.

Jackiellaceae R.M.Schust.

Jackiella Schiffn. (2)

Jackiella curvata E.A.Hodgs. & Allison

Jackiella javanica Schiffn.

Jungermanniaceae Rchb.

Jungermannia L. (1)

Jungermannia appressifolia Mitt.

Notoscyphaceae Crand.-Stotl., Váňa & Stotler

Notoscyphus Mitt. (1)

Notoscyphus lutescens (Lehm. & Lindenb.) Mitt.

=*Jungermannia lutescens* Lehm. & Lindenb.

Solenostomataceae Stotler & Crand.-Stotl.

Solenostoma Mitt. (8)

Solenostoma haskarliana (Nees) R.M.Schust. ex Váňa & D.G.Long

=*Alicularia haskarliana* Nees

=*Jungermannia haskarliana* (Nees) Mitt.

Solenostoma infuscum (Mitt.) J.Hentschel

=*Plectocolea infusca* Mitt.

Solenostoma inundatum (Hook.f. & Taylor) Mitt. ex Steph.

=*Aplozia victoriensis* Bibby

=*Jungermannia inundata* Hook.f. & Taylor

=*Solenostoma inundatum* var. *inundatum*

Solenostoma montanum (Steph.) Váňa

=*Jungermannia karsteniana* Beauverd

=*Jungermannia wattsiana* Steph.

=*Nardia montana* Steph.

=*Plectocolea eenii* S.W.Arnell

=*Solenostoma wattsianum* (Steph.) R.M.Schust. ex Váňa, Hentschel & Heinrichs

Solenostoma obliquifolium (Schiffn.) R.M.Schust. ex Váňa, Hentschel & Heinrichs

=*Jungermannia obliquifolia* (Schiffn.) Váňa

=*Nardia obliquifolia* Schiffn.

Solenostoma orbiculatum (Colenso) R.M.Schust.

=*Gymnomitrion orbiculatum* Colenso

=*Jamesoniella fragilis* Steph.

=*Jungermannia cambewarrana* Steph.

=*Jungermannia fragilis* Gottsche

Solenostoma tetragonum (Lindenb.) R.M.Schust. ex Váňa & D.G.Long

=*Jungermannia tetragona* Lindenb.

Solenostoma truncatum (Nees) R.M.Schust. ex Váňa & D.G.Long

=*Jungermannia truncata* Nees

Trichotemnomataceae R.M.Schust.

Trichotemnoma R.M.Schust. (1)

Trichotemnoma corrugatum (Steph.) R.M.Schust.

=*Blepharostoma corrugatum* Steph.

Lophocoleineae Schljakov

Lepicoleaceae R.M.Schust.

Lepicolea Dumort. (3)

Lepicolea attenuata (Mitt.) Steph.

=*Sendtnera attenuata* Mitt.

Lepicolea rara (Steph.) Grolle

=*Lepidozia rara* Steph.

Lepicolea scolopendra (Hook.) Dumort. ex Trevis.

=*Jungermannia scolopendra* Hook.

Mastigophoraceae R.M.Schust.

Mastigophora Nees (1)

Mastigophora diclados (Brid. ex F.Weber) Nees

=*Jungermannia diclados* Brid. ex F.Weber

Herbertaceae Mull.Frib. ex Fulford & Hatcher

Herbertus Gray (2)

Herbertus longifissus Steph.

=*Herbertus huerlimannii* H.A.Mill.

Herbertus oldfieldianus (Steph.) Rodway

=*Herbertus alpinus* (Steph.) E.A.Hodgs.

=*Schisma alpinum* Steph.

=*Schisma oldfieldianum* Steph.

Triandrophyllum Fulford & Hatcher (1)

Triandrophyllum subtrifidum (Hook.f. & Taylor) Fulford & Hatcher

=*Jungermannia subtrifida* Hook.f. & Taylor

Lepidoziaceae Limpr.

Drucella E.A.Hodgs. (1)

Drucella integristipula (Steph.) E.A.Hodgs.

=*Lepidozia integristipula* Steph.

Neogrollea E.A.Hodgs. (1)

Neogrollea notabilis E.A.Hodgs.

Paracromastigum Fulford & J.Taylor (2)

Paracromastigum longiscyphum (Taylor) R.M.Schust. & J.J.Engel

=*Jungermannia longiscypha* Taylor

=*Lepidozia longiscypha* var. *longiscypha*

=*Lepidozia longiscypha* var. *occidentalis* Herzog

=*Lepidozia longiscypha* (Taylor) Steph.

Paracromastigum vastilobum (Steph.) J.J.Engel & G.L.Merr.

=*Lepidozia vastiloba* Steph.

Pseudocephalozia R.M.Schust. (1)

Pseudocephalozia paludicola R.M.Schust.

Acromastigum A.Evans (16)

Acromastigum bancanum (Sande Lac.) A.Evans

=*Mastigobryum bancanum* Sande Lac.

Acromastigum carcinum M.A.M.Renner & T.C.Wilson

Acromastigum cavifolium R.M.Schust.

Acromastigum colensoanum (Mitt.) A.Evans ex Reimers

=*Mastigobryum colensoanum* Mitt.

=*Mastigobryum divaricatum* var. *muellerianum* Gottsche

=*Mastigobryum erosifolium* Steph.

Acromastigum divaricatum (Nees) A.Evans ex Reimers

=*Jungermannia divaricata* Gottsche, Lindenb. & Nees

=*Mastigobryum divaricatum* var. *muelleri* Gottsche

=*Mastigobryum divaricatum* Nees

=*Mastigobryum divaricum* var. *muellire* Bastow

=*Mastigobryum divaricum* Bastow

Acromastigum echinatiforme (De Not.) A.Evans

=*Mastigobryum echinatiforme* De Not.

Acromastigum exiguum (Steph.) A.Evans

=*Mastigobryum exiguum* Steph.

Acromastigum fumosum E.A.Br. & M.A.M.Renner

Acromastigum furcatifolium (Steph.) E.A.Br.

=*Lepidozia furcatifolia* Steph.

Acromastigum implexum M.A.M.Renner

Acromastigum interstisiale E.A.Br. & M.A.M.Renner

Acromastigum mooreanum (Steph.) E.A.Hodgs.

=*Bazzania mooreana* Steph.

Acromastigum prismaticale E.A.Br. & M.A.M.Renner

Acromastigum stenophyllum R.M.Schust.

Acromastigum tenax (Steph.) A.Evans

Acromastigum verticale (Steph.) E.A.Hodgs.

=*Mastigobryum verticale* Steph.

Bazzania Gray (37)

Bazzania accreta (Lehm. 39& Lindenb.) Trevis.

=*Mastigobryum accretum* Lehm. & Lindenb.

Bazzania adnexa (Lehm. & Lindenb.) Trevis.

=*Jungermannia adnexa* Lehm. & Lindenb.

=*Jungermannia novae-hollandiae* Nees ex Hook.f. & Taylor

Bazzania adnexa var. *adnexa*

=*Bazzania baileyana* (Steph.) Steph. ex Rodway

=*Bazzania novae-hollandiae* (Nees ex Hook.f. & Taylor) Carrington & Pearson

=*Mastigobryum bayleyanum* Steph.

=*Mastigobryum dentistipulum* Steph.

=*Mastigobryum novae-hollandiae* (Nees ex Hook.f. & Taylor) Nees

=*Mastigobryum sieberianum* Lindenb.

Bazzania amblyphylla Meagher

Bazzania avia Meagher

Bazzania bilobata N.Kitag.

Bazzania caudistipula (Steph.) Inoue & H.A.Mill.

=*Mastigobryum caudistipulum* Steph.

Bazzania citharodes Meagher

Bazzania corbieri (Steph.) Meagher
=*Mastigobryum corbieri* Steph.
=*Mastigobryum gracillimum* Steph.
=*Pleuroschisma crenata* Trevis.
Bazzania densa (Sande Lac.) Schiffn.
=*Mastigobryum densum* Sande Lac.
Bazzania echinata (Gottsche) Trevis.
Bazzania erosa (Reinw., Blume & Nees) Trevis.
=*Jungermannia erosa* Reinw., Blume & Nees
Bazzania fallax (Sande Lac.) Schiffn.
=*Mastigobryum fallax* Sande Lac.
Bazzania fasciculata (Steph.) Meagher
=*Mastigobryum fasciculatum* Steph.
Bazzania filiformis Steph.
Bazzania francana (Steph.) N.Kitag.
=*Mastigobryum francanum* Steph.
Bazzania fuhreri Meagher
Bazzania gamscottii Meagher
Bazzania gedeana (Steph.) Meijer
=*Mastigobryum gedeanum* Steph.
Bazzania hochstetteri (Reichardt) E.A.Hodgs.
=*Mastigobryum hochstetteri* Reichardt
Bazzania intermedia (Gottsche & Lindenb.) Trevis.
=*Mastigobryum intermedium* Gottsche & Lindenb.
Bazzania involuta (Mont.) Trevis.
=*Herpetium involutum* Mont.
=*Mastigobryum elegans* Colenso
Bazzania involuta var. *involuta*
Bazzania javanica (Sande Lac.) Schiffn.
=*Mastigobryum javanicum* Sande Lac.
Bazzania loricata (Reinw., Blume & Nees) Trevis.
=*Jungermannia loricata* Reinw., Blume & Nees
Bazzania mittenii (Steph.) Steph.
=*Bazzania nova* J.J.Engel & G.L.Merr.
=*Mastigobryum affine* Mitt.
=*Mastigobryum mittenii* Steph.
Bazzania monilinervis (Lehm. & Lindenb.) Trevis.
=*Jungermannia monilinervis* Lehm. & Lindenb.
Bazzania nitida (F.Weber) Grolle
=*Jungermannia nitida* F.Weber
Bazzania novae-zelandiae (Mitt.) Besch. & C.Massal.
=*Mastigobryum novae-zelandiae* Mitt.
Bazzania parisii (Steph.) N.Kitag.
=*Mastigobryum parisii* Steph.
Bazzania sauropoda Meagher
Bazzania serpentina (Sande Lac.) Trevis.
=*Jungermannia serpentina* Nees
=*Mastigobryum serpentina* (Nees) Nees
Bazzania subtilis (Sande Lac.) Trevis.
=*Mastigobryum subtile* Sande Lac.
Bazzania tessellata Meagher
Bazzania uncigera (Reinw., Blume & Nees) Trevis.
=*Jungermannia uncigera* Reinw., Blume & Nees
=*Mastigobryum uncigera* (Reinw., Blume & Nees) Nees
Bazzania vittata (Gottsche) Trevis.
=*Mastigobryum vittatum* Gottsche
Bazzania wattsiana (Steph.) Meagher
=*Mastigobryum wattsianum* Steph.
=*Mastigobryum wattsianum* Steph.
Bazzania wooroonooran Meagher
Bazzania zonulata Meagher

Psiloclada Mitt. (1)
Psiloclada clandestina Mitt.
Psiloclada clandestina subsp. *clandestina*

Telaranea Spruce ex Schiffn. (3)
Telaranea fragilifolia (R.M.Schust.) J.J.Engel & G.L.Merr.
=*Kurzia fragilifolia* R.M.Schust.
Telaranea herzogii (E.A.Hodgs.) E.A.Hodgs.
=*Lepidozia bisetula* Herzog
=*Lepidozia herzogii* E.A.Hodgs.
Telaranea inaequalis R.M.Schust. ex J.J.Engel & G.L.Merr.

Zoopsis (Hook.f. & Taylor) Hook.f. ex Gottsche, Lindenb. & Nees (5)
Zoopsis argentea (Hook.f. & Taylor) Hook.f. ex Gottsche, Lindenb. & Nees
=*Jungermannia argentea* Hook.f. & Taylor
Zoopsis argentea var. *argentea*
Zoopsis argentea var. *flagelliformis* (Colenso) R.M.Schust.
=*Zoopsis flagelliformis* Colenso
Zoopsis leitgebiana (Carrington & Pearson) Bastow
=*Cephalozia leitgebiana* Carrington & Pearson
Zoopsis liukiuensis Horik.
Zoopsis setigera K.I.Goebel
Zoopsis setulosa Leitg.
=*Cephalozia setulosa* (Leitg.) Spruce

Kurzia G.Martens (14)
Kurzia brevicalycina (Steph.) Grolle
=*Lepidozia brevicalycina* Steph.
Kurzia calcarata (Steph.) Grolle
=*Kurzia temnomoides* R.M.Schust.
=*Lepidozia calcarata* Steph.
Kurzia cucullifolia (Steph.) R.M.Schust.
=*Lepidozia cucullifolia* Steph.
Kurzia dendroides (Carrington & Pearson) Grolle
=*Lembidium dendroides* Carrington & Pearson
Kurzia hippurioides (Hook.f. & Taylor) Grolle
=*Jungermannia capillaris* Sw.
=*Jungermannia dispar* Mont. ex Taylor & Hook.f.
=*Jungermannia hippuroides* Hook.f. & Taylor
=*Lepidozia capillaris* var. *capillaris*
=*Lepidozia capillaris* (Sw.) Lindenb.
=*Lepidozia dispar* (Mont. ex Taylor & Hook.f.) Mont.
Kurzia lateconica (Steph.) Grolle
=*Lepidozia lateconica* Steph.
Kurzia pallescens Grolle
=*Kurzia quadriseta* var. *quadriseta*
=*Kurzia quadriseta* Grolle
=*Telaranea pallescens* (Grolle) J.J.Engel & G.L.Merr.
Kurzia reversa (Carrington & Pearson) Grolle
=*Lepidozia reversa* Carrington & Pearson
Kurzia saddlensis (Besch. & C.Massal.) Grolle
=*Lepidozia saddlensis* Besch. & C.Massal.
Kurzia setiformis (De Not.) J.J.Engel & R.M.Schust.
=*Lepidozia setiformis* De Not.

Kurzia sexfida (Steph.) Grolle

=*Lepidozia sexfida* Steph.

Kurzia tasmanica (Steph.) E.D.Cooper

=*Lepidozia tasmanica* Steph.

=*Telaranea tasmanica* (Steph.) J.J.Engel & G.L.Merr.

Kurzia tenax (Grev.) Grolle

=*Dendrolembidium tenax* (Grev.) Herzog

=*Jungermannia tenax* Grev.

=*Kurzia tenax* var. *tenax*

=*Lepidozia appendiculata* Steph.

Kurzia verticellata (Carrington) Grolle

=*Lepidozia verticellata* Carrington

=*Lepidozia verticillata* Carrington & Pearson

Hygrolembidium R.M.Schust. (1)

Hygrolembidium acrocladum (Berggr.) R.M.Schust.

=*Aplozia acroclada* Berggr.

=*Aplozia lacerata* Rodway

=*Lembidium isodictyon* Herzog

Isolembidium R.M.Schust. (1)

Isolembidium anomalum (Rodway) Grolle

=*Lembidium anomalum* Rodway

Isolembidium anomalum var. *anomalum*

Isolembidium anomalum var. *cucullatum* (E.A.Hodgs.) J.J.Engel & R.M.Schust.

=*Lembidium cucullatum* E.A.Hodgs.

Ceramanus E.D.Cooper (4)

Ceramanus centipes (Taylor ex Gotsche, Lindenb. & Nees) E.D.Cooper

=*Jungermannia centipes* Taylor ex Gottsche, Lindenb. & Nees

=*Lepidozia centipes* Taylor ex Gottsche, Lindenb. & Nees

=*Telaranea centipes* (Taylor) R.M.Schust.

Ceramanus clatritexta (Steph.) E.D.Cooper

=*Lepidozia clatritexta* Steph.

=*Lepidozia complanata* Herzog

=*Lepidozia whiteleggeana* Steph.

=*Telaranea clatritexta* (Steph.) J.J.Engel & G.L.Merr.

Ceramanus elegans (Colenso) E.D.Cooper

=*Lepidozia elegans* Colenso

=*Lepidozia tripilosa* Steph.

=*Telaranea elegans* (Colenso) J.J.Engel & G.L.Merr.

Ceramanus grossiseta (Steph.) E.D.Cooper

=*Lepidozia grossiseta* Steph.

=*Telaranea grossiseta* (Steph.) J.J.Engel & R.M.Schust.

Lepidozia (Dumort.) Dumort. (27)

=*Pleuroschisma* sect. *Lepidozia* Dumort,

Lepidozia appressifolia Steph.

=*Lepidozia appressifolia* f. *appressifolia*

=*Lepidozia appressifolia* f. *armata* Rodway

=*Lepidozia capillaris* var. *geniculata* Carrington & Pearson

Lepidozia asymmetrica Steph.

=*Lepidozia asymmetrica* f. *asymmetrica*

=*Lepidozia asymmetrica* f. *parva* Rodway

Lepidozia buffalona Steph.

Lepidozia chordulifera Taylor

Lepidozia communis Steph.

Lepidozia concinna Colenso

Lepidozia crassitexta Steph.

Lepidozia digitata Herzog

Lepidozia eenii S.W.Arnell

Lepidozia glaucophylla (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

=*Jungermannia glaucophylla* Hook.f. & Taylor

Lepidozia gracillima Carrington & Pearson

Lepidozia haskarliana Steph.

=*Lepidozia supradecomposita* var. *haskarliana* Gottsche, Lindenb. & Nees

Lepidozia hastatistipula Steph.

Lepidozia laevifolia (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

=*Jungermannia laevifolia* Hook.f. & Taylor

Lepidozia laevifolia var. *laevifolia*

Lepidozia microstipula Steph.

Lepidozia montana Steph.

Lepidozia nova Steph.

Lepidozia obtusiloba Steph.

Lepidozia obtusiloba var. *obtusiloba*

Lepidozia parvistipa Taylor

Lepidozia pendulina (Hook.) Lindenb.

=*Jungermannia pendulina* Hook.

Lepidozia procera Mitt.

=*Lepidozia parvitexta* Steph.

Lepidozia quadrifida Kunze ex Lindenb.

Lepidozia septemfida Steph.

=*Lepidozia multifida* Steph.

Lepidozia terricola Steph.

Lepidozia ulothrix (Schwägr.) Lindenb.

=*Jungermannia albula* Hook.f. & Taylor

=*Jungermannia ulothrix* Schwägr.

Lepidozia wattsiana Steph.

Lepidozia weymouthiana Steph.

Neolepidozia Fulford & J.Taylor (8)

Neolepidozia capilligera (Schwägr.) Fulford & J.Taylor

=*Jungermannia capilligera* Schwägr.

=*Telaranea capilligera* (Schwägr.) R.M.Schust.

Neolepidozia consobrina (J.J.Engel & G.L.Merr.) E.D.Cooper

=*Telaranea consobrina* J.J.Engel & G.L.Merr.

Neolepidozia disparata (J.J.Engel & G.L.Merr.) E.D.Cooper

Neolepidozia palmata (J.J.Engel & G.L.Merr.) E.D.Cooper

=*Telaranea palmata* J.J.Engel & G.L.Merr.

Neolepidozia patentissima (Hook.f. & Taylor) E.D.Cooper

=*Jungermannia patentissima* Hook.f. & Taylor

=*Lepidozia gottscheana* Lindenb.

=*Neolepidozia gottscheana* (Lindenb.) Hodgs.

=*Telaranea gottscheana* (Lindenb.) E.A.Hodgs.

=*Telaranea patentissima* (Hook.f. & Taylor) E.A.Hodgs.

Neolepidozia patentissima var. *ampliata* (J.J.Engel & G.L.Merr.) E.D.Cooper

=*Telaranea patentissima* var. *ampliata* J.J.Engel & G.L.Merr.

Neolepidozia patentissima var. *patentissima*

=*Telaranea patentissima* var. *patentissima*

Neolepidozia quadristipula (Steph.) E.D.Cooper

=*Lepidozia quadristipula* Steph.

=*Telaranea quadristipula* (Steph.) J.J.Engel & G.L.Merr.

Neolepidozia tridactylis (Lehm. & Lindenb.) E.D.Cooper

=*Jungermannia tridactylis* Lehm. & Lindenb.

=*Telaranea tridactylis* (Lehm. & Lindenb.) J.J.Engel & G.L.Merr.

=*Lepidozia tridactylis* (Lehm. & Lindenb.) Mont.

=*Lepidozia oldfieldiana* Steph.

Neolepidozia verruculosa (J.J.Engel & G.L.Merr.) E.D.Cooper

=*Telaranea verruculosa* J.J.Engel & G.L.Merr.

Tricholepidozia (R.M.Schust.) E.D.Cooper (3)

=*Telaranea* (*Tricholepidozia*) R.M.Schust.

Tricholepidozia lindenbergii (Gottsche) E.D.Cooper

=*Lepidozia lindenbergii* Gottsche

=*Mastigophora lindenbergii* (Gottsche) Trevis.

=*Telaranea lindenbergii* (Gottsche) J.J.Engel & G.L.Merr.

Tricholepidozia lindenbergii var. *lindenbergii*

Tricholepidozia pulcherrima (Steph.) E.D.Cooper

=*Telaranea pulcherrima* (Steph.) R.M.Schust.

Tricholepidozia pulcherrima var. *mooreana* (Steph.) E.D.Cooper

=*Lepidozia mooreana* Steph.

=*Telaranea pulcherrima* var. *mooreana* (Steph.) J.J.Engel & G.L.Merr.

Tricholepidozia quadriseta (Steph.) E.D.Cooper

=*Lepidozia quadricilia* Steph.

=*Lepidozia quadriseta* Steph.

=*Telaranea quadricilia* (Steph.) J.J.Engel & G.L.Merr.

=*Telaranea quadriseta* (Steph.) J.J.Engel & G.L.Merr.

Trichocoleaceae Nakai

Archeophylla R.M.Schust. (1)

Archeophylla schusteri (E.A.Hodgs. & Allison) R.M.Schust.

=*Temnoma schusteri* E.A.Hodgs. & Allison

Castanoclobus J.J.Engel & Glenny (1)

Castanoclobus julaceus (Hatcher ex J.J.Engel) J.J.Engel & Glenny

=*Leiomitra julacea* Hatcher ex J.J.Engel

Eotrichocolea R.M.Schust. (1)

Eotrichocolea polyacantha (Hook.f. & Taylor) R.M.Schust.

=*Jungermannia polyacantha* Hook.f. & Taylor

Leiomitra Lindb. (1)

Leiomitra elegans (Lehm.) Hässel

=*Trichocolea elegans* Lehm.

Trichocolea Dumort. (6)

Trichocolea hatcheri E.A.Hodgs.

Trichocolea minutifolia Steph.

Trichocolea mollissima (Hook.f. & Taylor) Gottsche

=*Jungermannia mollissima* Hook.f. & Taylor

=*Jungermannia tomentella* var. *javanica* Reinw., Blume & Nees

=*Trichocolea australis* Steph.

Trichocolea pluma (Reinw., Blume & Nees) Mont.

=*Jungermannia pluma* Reinw., Blume & Nees

Trichocolea rigida R.M.Schust.

Trichocolea wattsiana Steph.

Brevianthaceae J.J.Engel & R.M.Schust.

Brevianthus J.J.Engel & R.M.Schust. (1)

Brevianthus flavus (Grolle) J.J.Engel & R.M.Schust.

=*Jackiella flava* Grolle

Brevianthus flavus subsp. *flavus*

Tetracymbaliella Grolle (2)

Tetracymbaliella decipiens (Gottsche) Grolle

=*Chiloscyphus decipiens* Gottsche

=*Chiloscyphus inflatistipulus* Steph.

=*Heteroscyphus decipiens* (Gottsche) J.J.Engel & R.M.Schust.

Tetracymbaliella subsimplex (Austin) J.J.Engel

=*Polyotus subsimplex* Austin

=*Tetracymbaliella rodwayana* Grolle

Lophocoleaceae Vanden Berghen

Heteroscyphus Schiffn. (25)

=*Cyanolophocolea* (R.M.Schust.) R.M.Schust.

=*Lophocolea* sect. *Cyanolophocolea* R.M.Schust.

Heteroscyphus allodontus (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

=*Chiloscyphus allodontus* (Hook.f. & Taylor) E.A.Hodgs.

=*Chiloscyphus biciliatus* (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees

=*Chiloscyphus cambewarranus* Steph.

=*Chiloscyphus piperitus* Mitt.

=*Heteroscyphus biciliatus* (Hook.f. & Taylor) J.J.Engel

=*Heteroscyphus cambewarranus* (Steph.) J.J.Engel & R.M.Schust.

=*Jungermannia allodonta* Hook.f. & Taylor

=*Jungermannia biciliata* Hook.f. & Taylor

=*Lophocolea allodonta* (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

Heteroscyphus ammophilus (Colenso) R.M.Schust.

=*Chiloscyphus ammophilus* Colenso

=*Chiloscyphus fissistipus* f. *integrifolius* Rodway

Heteroscyphus ammophilus var. *ammophilus*

Heteroscyphus ammophilus var. *obtusifolius* J.J.Engel & G.L.Merr.

Heteroscyphus argutus (Reinw., Blume & Nees) Schiffn.

=*Chiloscyphus argutus* (Reinw. Blume & Nees) Nees

=*Chiloscyphus endlicherianus* (Nees) Nees

=*Jungermannia arguta* Reinw., Blume & Nees

=*Jungermannia endlicheriana* Nees

=*Jungermannia retrospectans* Nees

Heteroscyphus aselliformis (Reinw., Blume & Nees) Schiffn.

=*Jungermannia aselliformis* Reinw., Blume & Nees

Heteroscyphus billardierei (Schwägr.) Schiffn.

=*Chiloscyphus billardierei* f. *billardierei*

=*Chiloscyphus billardierei* var. *billardierei*

=*Chiloscyphus billardieri* (Sw.) Nees

=*Chiloscyphus circumdentatus* W.Martin & E.A.Hodgs.

=*Chiloscyphus simillimus* Steph.

=*Heteroscyphus simillimus* (Steph.) J.J.Engel & R.M.Schust.

=*Jungermannia billardierei* Schwägr.

Heteroscyphus billardierei var. *clasmatocoleoides* (J.J.Engel & G.L.Merr.) J.J.Engel

=*Chiloscyphus billardierei* f. *integrifolius* Rodway

=*Heteroscyphus circumdentatus* var. *clasmatocoleoides* J.J.Engel & G.L.Merr.

Heteroscyphus ciliatus (Steph.) Schiffn.

=*Chiloscyphus billardierei* f. *ciliatus* (Steph.) Rodway

=*Chiloscyphus billardierei* var. *hookerianus* Gottsche, Lindenb. & Nees

=*Chiloscyphus ciliatus* Steph.

Heteroscyphus coalitus (Hook.) Schiffn.
=*Chiloscyphus communis* Steph.
=*Chiloscyphus maximus* Steph.
=*Heteroscyphus maximus* (Steph) J.J.Engel & R.M.Schust.
=*Heteroscyphus sexdentatus* (Steph.) J.J.Engel
=*Jungermannia coalita* Hook.
=*Lophocolea sexdentata* Steph.
Heteroscyphus coalitus var. *simplicifolius* J.J.Engel
Heteroscyphus coalitus var. *coalitus*
Heteroscyphus combinatus (Nees) Schiffn.
=*Jungermannia combinata* Nees
Heteroscyphus conjugatus (Mitt.) J.J.Engel & R.M.Schust.
=*Chiloscyphus conjugatus* f. *conjugatus*
=*Chiloscyphus conjugatus* f. *dentatus* Rodway
=*Chiloscyphus conjugatus* Mitt.
=*Chiloscyphus moorei* Steph.
=*Heteroscyphus moorei* (Steph.) J.J.Engel & R.M.Schust.
=*Lophocolea moorei* (Steph.) Steph.
Heteroscyphus echinellus (Lindenb. & Gottsche) J.J.Engel & Xiao L.He
=*Chiloscyphus echinellus* (Lindenb. & Gottsche) Mitt.
=*Cyanolophocolea echinella* (Lindenb. & Gottsche) R.M.Schust.
=*Lophocolea echinella* Lindenb. & Gottsche
Heteroscyphus fissistipus (Hook.f. & Taylor) Schiffn.
=*Chiloscyphus fissistipus* var. *longifolius* Carrington & Pearson
=*Chiloscyphus fissistipus* (Hook.f. Taylor) Gottsche, Lindenb. & Nees
=*Chiloscyphus longifolius* (Carrington & Pearson) Steph.
=*Chiloscyphus spinosus* Gottsche ex Gottsche, Lindenb. & Nees
=*Heteroscyphus longifolius* (Carrington & Pearson) Schiffn.
=*Jungermannia fissistipa* Hook.f. & Taylor
Heteroscyphus fissistipus var. *fissistipus*
=*Chiloscyphus kirkii* Steph.
Heteroscyphus gunnianus (Mitt.) J.J.Engel & R.M.Schust.
=*Chiloscyphus gunnianus* Mitt.
Heteroscyphus knightii (Steph.) Grolle
=*Chiloscyphus knightii* Steph.
=*Chiloscyphus tridentatus* Mitt.
=*Heteroscyphus tridentatus* (Mitt.) J.J.Engel & R.M.Schust.
Heteroscyphus levieri (Steph.) Schiffn.
=*Chiloscyphus levieri* Steph.
Heteroscyphus limosus (Carrington & Pearson) Schiffn.
=*Chiloscyphus limosus* var. *laevigatus* Carrington & Pearson
=*Chiloscyphus limosus* var. *limosus*
=*Chiloscyphus limosus* Carrington & Pearson
Heteroscyphus menziesii (Mitt.) J.J.Engel
=*Chiloscyphus menziesii* Mitt.
=*Chiloscyphus weymouthianus* Steph.
=*Heteroscyphus weymouthianus* (Steph.) Schiffn.
Heteroscyphus mononuculus J.J.Engel
Heteroscyphus mononuculus var. *ammophilopsis* J.J.Engel
Heteroscyphus mononuculus var. *mononuculus*
Heteroscyphus multifidus (Steph.) J.J.Engel & R.M.Schust.
=*Chiloscyphus multifidus* Steph.
Heteroscyphus multifidus var. s*ubintegerrimus* J.J.Engel
Heteroscyphus sinuosus (Hook.) Schiffn.
=*Chiloscyphus sinuosus* (Hook.) Nees
=*Jungermannia sinuosa* Hook.
Heteroscyphus splendens (Lehm. & Lindenb.) Grolle
=*Jungermannia splendens* Lehm. & Lindenb.
Heteroscyphus supinus (Hook.f. & Taylor) R.M.Schust.
=*Chiloscyphus glaucescens* Steph.
=*Chiloscyphus supinus* Hook.f. & Taylor
Heteroscyphus tasmanicus (Steph.) J.J.Engel & R.M.Schust.
=*Chiloscyphus tasmanicus* Steph.
Heteroscyphus triacanthus (Hook.f. & Taylor) Schiffn.
=*Chiloscyphus odoratus* Mitt.
=*Chiloscyphus triacanthus* (Hook.f. & Lev.) Steph.
=*Jungermannia triacantha* Hook.f. & Lev.
=*Lophocolea triacantha* Hook.f. & Taylor
Heteroscyphus triacanthus var. *magnistipulatus* J.J.Engel
Heteroscyphus triacanthus var. *triacanthus*
Heteroscyphus varians (Steph.) J.J.Engel
=*Chiloscyphus varians* (Steph.) J.J.Engel & R.M.Schust.
=*Lophocolea varians* Steph.
Heteroscyphus zollingeri (Gottsche) Schiffn.
=*Chiloscyphus zollingeri* Gottsche
Leptophyllopsis R.M.Schust. (1)
Leptophyllopsis laxus (Mitt.) R.M.Schust.
=*Chiloscyphus laxus* Mitt.
=*Lophocolea weymouthiana* Steph.
Cryptolophocolea L.Söderstr., Crand.-Stotl., Stotler & Váňa (7)
Cryptolophocolea connatifolia (J.J.Engel) L.Söderstr.
=*Chiloscyphus connatifolius* J.J.Engel
Cryptolophocolea edentata (J.J.Engel) L.Söderstr.
=*Chiloscyphus edentatus* J.J.Engel
Cryptolophocolea helmsiana (Steph.) L.Söderstr.
=*Chiloscyphus helmsianus* (Steph.) J.J.Engel & R.M.Schust.
=*Lophocolea helmsiana* Steph.
Cryptolophocolea leucophylla (Hook.f. & Taylor) L.Söderstr.
=*Chiloscyphus leucophyllus* (Hook.f. & Taylor) Gottsche, Lindenb. & Nees
=*Chiloscyphus verrucosus* (Steph.) J.J.Engel & R.M.Schust.
=*Jungermannia leucophylla* Hook.f. & Taylor
=*Lophocolea leucophylla* (Hook.f. & Taylor) Gottsche, Lindenb. & Nees
=*Lophocolea leucophylla* (Hook.f. & Taylor) Mitt.
=*Lophocolea verrucosa* Steph.
Cryptolophocolea mitteniana (Colenso) L.Söderstr.
=*Isotachis mitteniana* Colenso
Cryptolophocolea mitteniana var. *obtusa* (J.J.Engel) L.Söderstr.
Cryptolophocolea subopposita (J.J.Engel) L.Söderstr.
=*Chiloscyphus subopposita* J.J.Engel
Cryptolophocolea trialata (Gottsche) L.Söderstr.
=*Lophocolea trialata* Gottsche
=*Chiloscyphus trialatus* (Gottsche) J.J.Engel & R.M.Schust.
=*Chiloscyphus archeri* J.J.Engel & R.M.Schust.
=*Chiloscyphus pearsonii* J.J.Engel & R.M.Schust.
=*Lophocolea bicuspidata* Pearson
=*Lophocolea tasmanica* Mitt.

Leptoscyphus Mitt. (7)

Leptoscyphus australis (Gottsche, Lindenb. & Nees) R.M.Schust.

=*Chiloscyphus australis* Gottsche, Lindenb. & Nees

=*Jungermannia australis* Hook.f. & Taylor

=*Lophocolea australis* (Hook.f. & Taylor) Mitt.

=*Lophocolea hodgsoniae* Hamlin

=*Lophocolea novae-zeelandiae* f. *varians* Gottsche

Leptoscyphus compactus (Colenso) J.J.Engel

=*Chiloscyphus compactus* Colenso

Leptoscyphus excipulatus (Steph.) J.J.Engel

=*Lophocolea excipulata* f. *excipulata*

=*Lophocolea excipulata* Steph.

Leptoscyphus excipulatus var. *canaliculatus* J.J.Engel

Leptoscyphus excipulatus var. *excipulatus*

=*Leptoscyphus belmoranus* (Steph.) J.J.Engel

=*Lophocolea belmorana* Steph.

Leptoscyphus heterophyllus (Steph.) J.J.Engel

=*Chiloscyphus heterophyllus* Steph.

=*Heteroscyphus heterophyllus* (Steph.) J.J.Engel & R.M.Schust.

Leptoscyphus idiodontus J.J.Engel

Leptoscyphus incomptus J.J.Engel

=*Lophocolea excipulata* f. *humilior* Rodway

=*Lophocolea exipulata* f. *minor* Rodway

Leptoscyphus microphyllidiscus J.J.Engel

Chiloscyphus Corda (20)

Chiloscyphus austrigenus (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

=*Jungermannia austrigena* Hook.f. & Taylor

Chiloscyphus austrigenus subsp. *okaritanus* (Steph.) J.J.Engel

=*Chiloscyphus affinis* Gottsche

=*Chiloscyphus muelleri* Gottsche

=*Heteroscyphus affinis* (Gottsche) J.J.Engel & R.M.Schust.

=*Heteroscyphus muelleri* (Gottsche) J.J.Engel & R.M.Schust.

=*Lophocolea austrigena* f. *bifida* Rodway

=*Lophocolea cordifolia* Steph.

=*Lophocolea gunniana* Nees

=*Lophocolea okaritana* Steph.

Chiloscyphus bispinosus (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

=*Jungermannia bispinosa* Hook.f. & Taylor

=*Lophocolea bispinosa* (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

Chiloscyphus canaliculatus Gottsche, Lindenb. & Nees

Chiloscyphus canaliculatus var. *canaliculatus*

=*Chiloscyphus oldfieldianus* (Steph.) J.J.Engel & R.M.Schust.

=*Chiloscyphus wattsiana* (Steph.) J.J.Engel & R.M.Schust.

=*Lophocolea oldfieldiana* Steph.

=*Lophocolea wattsiana* Steph.

Chiloscyphus cuspidatus (Nees) J.J.Engel & R.M.Schust.

=*Lophocolea bidentata* f. *cuspidata* Nees

=*Lophocolea cuspidata* (Nees) Limpr.

=*Lophocolea mooreana* Steph.

Chiloscyphus excisifolius (Steph.) J.J.Engel & R.M.Schust.

=*Lophocolea excisifolia* Steph.

Chiloscyphus fertilis J.J.Engel

Chiloscyphus gippslandicus J.J.Engel & R.M.Schust.

=*Lophocolea lauterbachii* Steph.

Chiloscyphus howeanus (Steph.) J.J.Engel & R.M.Schust.

=*Lophocolea howeana* Steph.

Chiloscyphus longiciliatus (Steph.) J.J.Engel & R.M.Schust.

=*Lophocolea longiciliata* Herzog

Chiloscyphus monoicus J.J.Engel & R.M.Schust.

=*Lophocolea floribunda* Steph.

Chiloscyphus muricatus (Lehm.) J.J.Engel & R.M.Schust.

=*Jungermannia muricata* Lehm.

=*Lophocolea hirtifolia* Hook.f. & Taylor

=*Lophocolea muricata* (Lehm.) Nees

Chiloscyphus novaezeelandiae (Lehm. & Lindenb.) J.J.Engel & R.M.Schust.

=*Jungermannia novae-zeelandiae* Lehm. & Lindenb.

Chiloscyphus novaezeelandiae var. *grandistipulus* (Schiffn.) J.J.Engel

=*Lophocolea australis* Gottsche

=*Lophocolea austroalpina* Steph.

=*Lophocolea grandistipula* Schiffn.

=*Lophocolea rotundistipula* Steph.

Chiloscyphus novaezeelandiae var. *meridionalis* (Steph.) J.J.Engel

=*Chiloscyphus dargonius* Gottsche

=*Lophocolea dargonia* (Gottsche) Steph.

=*Lophocolea meridionalis* Steph.

Chiloscyphus novaezeelandiae var. *novaezeelandiae*

=*Chiloscyphus macrostipulus* (Steph.) J.J.Engel & R.M.Schust.

=*Chiloscyphus sellingii* (S.W.Arnell) J.J.Engel & R.M.Schust.

=*Lophocolea macrostipula* Steph.

=*Lophocolea novae-zeelandiae* f. *novae-zeelandiae*

=*Lophocolea novae-zeelandiae* (Lehm. & Lindenb.) Nees

=*Lophocolea sellingii* S.W.Arnell

Chiloscyphus perpusillus (Hook.f. & Taylor) J.J.Engel

=*Chiloscyphus brevis* (Steph.) J.J.Engel & R.M.Schust.

=*Chiloscyphus decoloratus* (Steph.) J.J.Engel & R.M.Schust.

=*Chiloscyphus macrolobus* (Steph.) J.J.Engel & R.M.Schust.

=*Jungermannia perpusillus* Hook.f. & Taylor

=*Lophocolea brevis* Steph.

=*Lophocolea decolorata* Steph.

=*Lophocolea macroloba* Steph.

=*Lophocolea perpusilla* (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

Chiloscyphus rarus (Steph.) J.J.Engel & R.M.Schust.

=*Lophocolea rara* Steph.

Chiloscyphus rupicola (Steph.) J.J.Engel & R.M.Schust.

=*Chiloscyphus fissistipulus* (Steph.) J.J.Engel & R.M.Schust.

=*Chiloscyphus spongiosus* (Steph.) J.J.Engel & R.M.Schust.

=*Lophocolea fissistipula* Steph.

=*Lophocolea heterophylloides* var. *macrocalyx* Pearson

=*Lophocolea rupicola* Steph.

=*Lophocolea spongiosa* Steph.

=*Lophocolea variabilis* Steph.

Chiloscyphus semiteres (Lehm. & Lindenb.) Lehm. & Lindenb.

=*Chiloscyphus squamatus* (Herzog) J.J.Engel & R.M.Schust.

=*Jungermannia semiteres* Lehm.

=*Lophocolea semiteres* (Lehm.) Mitt.
=*Lophocolea squamata* Herzog
Chiloscyphus semiteres var. *retusus* J.J.Engel
Chiloscyphus semiteres var. *semiteres*
=*Jungermannia bridelii* Lehm. & Lindenb.
=*Jungermannia canaliculata* Brid. ex Bonner
=*Lophocolea dalliana* Steph.
=*Lophocolea forsythiana* Steph.
=*Lophocolea geheebii* Steph.
=*Lophocolea heterophylloides* var. *heterophylloides*
=*Lophocolea heterophylloides* Nees
Chiloscyphus subemarginatus (Hook.f. & Taylor) J.J.Engel & R.M.Schust.
=*Chiloscyphus corticola* (Steph.) J.J.Engel & R.M.Schust.
=*Chiloscyphus longistipulus* (Steph.) J.J.Engel & R.M.Schust.
=*Leptoscyphus longistipulus* (Hook.f. & Taylor) J.J.Engel
=*Leptoscyphus subemarginatus* (Hook.f. & Taylor) J.J.Engel
=*Lophocolea corticola* Steph.
=*Lophocolea longistipula* Steph.
=*Lophocolea subemarginata* Hook.f. & Taylor
Chiloscyphus subporosus (Mitt.) J.J.Engel & R.M.Schust.
=*Lophocolea subporosa* Mitt.
Chiloscyphus subporosus var. *subporosus*
=*Lophocolea argentea* Steph.
Chiloscyphus villosus (Mitt. ex Steph.) J.J.Engel & R.M.Schust.
=*Lophocolea villosa* Mitt. ex Steph.
Clasmatocolea Spruce (7)
Clasmatocolea humilis (Hook.f. & Taylor) Grolle
=*Chiloscyphus humilis* (Hook.f. & Taylor) Hassel
=*Jungermannia humilis* Hook.f. & Taylor
=*Lophocolea humilis* (Hook.f. & Taylor) Steph.
=*Nardia humilis* (Hook.f. & Taylor) Trevis.
=*Solenostoma humilis* (Hook.f. & Taylor) Mitt.
Clasmatocolea humilis var. *humilis*
Clasmatocolea inflexispina (Hook.f. & Taylor) J.J.Engel
=*Chiloscyphus inflexispinus* (Hook.f. & Taylor) J.J.Engel & R.M.Schust.
=*Clasmatocolea amplectens* (Mitt.) J.J.Engel & R.M.Schust.
=*Jungermannia inflexispina* Hook.f. & Taylor
=*Lophocolea amplectens* Mitt.
=*Lophocolea inflexispina* (Hook.f. & Taylor) Gottsche, Lindenb. & Nees
Clasmatocolea marginata (Steph.) Grolle
=*Clasmatocolea crassimarginata* Grolle
=*Jungermannia marginata* Mitt.
=*Leioscyphus marginatus* Steph.
=*Odontoschisma marginata* (Steph.) Steph.
Clasmatocolea notophylla (Hook.f. & Taylor) Grolle
=*Chiloscyphus cordifolius* Rodway
=*Jungermannia notophylla* Hook.f. & Taylor
=*Lophocolea cordifolia* f. *cordifolia*
=*Lophocolea cordifolia* f. *disticha* Rodway
=*Lophocolea notophyllus* (Hook.f. & Taylor) E.A.Hodgs.
=*Lophocolea tumida* Steph.
Clasmatocolea rigens (Hook.f. & Taylor) J.J.Engel
=*Lophocolea rigens* (Hook.f. & Taylor) A.Evans
Clasmatocolea strongylophylla (Hook.f. & Taylor) Grolle
=*Chiloscyphus strongylophyllus* (Hook.f. & Taylor) Hassel
=*Clasmatocolea angulistipula* (Steph.) Grolle
=*Jungermannia strongylophylla* Hook.f. & Taylor
=*Jungermannia turgescens* Hook.f. & Taylor
=*Lophocolea angulistipula* Steph.
=*Lophocolea strongylophylla* (Hook.f. & Taylor) E.A.Hodgs.
Clasmatocolea vermicularis (Lehm.) Grolle
=*Chiloscyphus vermicularis* (Lehm.) Hassel
=*Jungermannia vermicularis* Lehm.
Clasmatocolea verrucosa J.J.Engel
Hepatostolonophora J.J.Engel & R.M.Schust. (2)
Hepatostolonophora paucistipula (Rodway) J.J.Engel
=*Lophocolea paucistipula* Rodway
Hepatostolonophora rotata (Hook.f. & Taylor) J.J.Engel
=*Aplozia alpina* f. *alpina*
=*Aplozia alpina* f. *stipulata* Rodway
=*Aplozia alpina* Rodway
=*Aplozia rotata* (Hook.f. & Taylor) Rodway
=*Jungermannia rotata* Hook.f. & Taylor
Stolonivector J.J.Engel (1)
Stolonivector obtusilobus J.J.Engel
Plagiochilaceae Mull.Frib.
Dinckleria Trevis. (2)
Dinckleria pleurata (Hook.f. & Taylor) Trevis.
=*Jungermannia pleurata* Hook.f. & Taylor
Dinckleria singularis (Schiffn.) M.A.M.Renner, Schäf.-Verw. & Heinrichs
=*Plagiochila singularis* Schiffn.
Cryptoplagiochila S.D.F.Patzak, M.A.M.Renner & Heinrichs (1)
Cryptoplagiochila radiculosa (Mitt.) S.D.F.Patzak, M.A.M.Renner & Heinrichs
=*Plagiochila radiculosa* Mitt.
=*Plagiochila wattsii* Steph. ex Rodway
Chiastocaulon Carl (9)
=*Acrochila* R.M.Schust.
=*Plagiochilion* S.Hatt.
Chiastocaulon biseriale (Lehm. & Lindenb.) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs
=*Acrochila biserialis* (Lehm. & Lindenb.) Grolle
=*Plagiochila biserialis* Lehm. & Lindenb.
=*Plagiochila simpsonii* W.Martin & E.A.Hodgs.
Chiastocaulon braunianum (Nees) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs
=*Plagiochilion conjugatum* (Hook.) R.M.Schust.
Chiastocaulon dendroides (Nees) Carl
=*Jungermannia dendroides* Nees
=*Plagiochila dendroides* (Nees) Lindenb.
Chiastocaulon fasciculatum M.A.M.Renner
Chiastocaulon flamabile M.A.M.Renner
Chiastocaulon geminifolium (Mitt.) M.A.M.Renner
Chiastocaulon oppositum (Reinw., Blume & Nees) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs
=*Jungermannia opposita* Reinw., Blume & Nees
=*Plagiochilion oppositum* (Reinw., Blume & Nees) S.Hatt.
Chiastocaulon pachycephalum (De Not.) Herzog
=*Plagiochilion pachycephalum* (De Not.) Inoue

Chiastocaulon proliferum (Mitt) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs

Plagiochila (Dumort.) Dumort. (41)

=*Radula* sect. *Plagiochila* Dumort.

Plagiochila abietina (Nees) Nees & Mont.

=*Jungermannia abietina* Nees

Plagiochila acutifolia Steph.

Plagiochila aemula M.A.M.Renner

Plagiochila aenea M.A.M.Renner

Plagiochila apatila M.A.M.Renner

Plagiochila arbuscula (Brid. ex Lehm. & Lindenb.) Lindenb.

=*Jungermannia arbuscula* Brid. ex Lehm. & Lindenb.

=*Plagiochila australis* Steph.

=*Plagiochila ferdinandi-muelleri* Steph.

Plagiochila baileyana Steph.

Plagiochila banksiana Gottsche

Plagiochila bantamensis (Reinw., Blume & Nees) Mont.

=*Jungermannia bantamensis* Reinw., Blume & Nees

Plagiochila baylisii Inoue & R.M.Schust.

Plagiochila blepharophora (Nees) Lindenb.

=*Jungermannia blepharophora* Nees

Plagiochila circinalis (Lehm. & Lindenb.) Lehm. & Lindenb. ex Lindenb.

=*Jungermannia circinalis* Lehm. & Lindenb.

=*Jungermannia hemicardia* Hook.f. & Taylor

=*Plagiochila decurvifolia* Steph.

=*Plagiochila deflexifolia* Steph.

Plagiochila conturbata Steph.

Plagiochila daviesiana Steph.

=*Plagiochila bellendeniensis* Steph.

Plagiochila fasciculata Lindenb.

=*Jungermannia aculeata* Hook.f. & Taylor

=*Plagiochila deltoidea* var. *pachydictyon* Herzog

=*Plagiochila fasciculata* var. *labillardiereana* Gottsche

=*Plagiochila fasciculata* var. *muelleriana* Gottsche

=*Plagiochila rossii* Steph.

=*Plagiochila victoriae* Steph.

Plagiochila fuscella (Hook.f. & Taylor) Taylor & Hook.f. ex Gottsche, Lindenb. & Nees

=*Jungermannia fuscella* Hook.f. & Taylor

=*Plagiochila taylorii* Steph.

Plagiochila hampeana Gottsche

Plagiochila hartziana Pearson

Plagiochila incurvicolla (Hook.f. & Taylor) Taylor & Hook.f. ex Gottsche, Lindenb. & Nees

=*Jungermannia incurvicolla* Hook.f. & Taylor

Plagiochila intertexta Hook.f. & Taylor

=*Plagiochila sinclairii* Mitt.

=*Plagiochila traversii* Steph.

Plagiochila lamellata M.A.M.Renner

Plagiochila meridionalis M.A.M.Renner

Plagiochila minax M.A.M.Renner

Plagiochila minutissima M.A.M.Renner

Plagiochila monospiris Inoue & Grolle

Plagiochila nebulosa M.A.M.Renner

Plagiochila norfolkensis Steph.

Plagiochila obtusa Lindenb.

Plagiochila paucidens Steph.

=*Plagiochila camarae* Steph. ex Dugas

=*Plagiochila metcalfii* Steph.

Plagiochila queenslandica Steph.

=*Plagiochila pendula* Hampe & Gottsche

Plagiochila ratkowskyana Inoue

Plagiochila retrospectans Nees

=*Jungermannia opisthotona* Hook.f. & Taylor

=*Jungermannia retrospectans* Nees

=*Plagiochila apiculata* Steph. ex Dugas

=*Plagiochila apiculata* Steph. ex Weymouth

Plagiochila sandei Dozy ex Sande Lac.

=*Plagiochila robinsonii* Steph.

Plagiochila stephensoniana Mitt.

=*Plagiochila obscura* Colenso

Plagiochila streimannii Inoue

Plagiochila strombifolia Taylor ex Lehm.

=*Jungermannia strombifolia* Hook.f. & Taylor

=*Plagiochila kingiana* Gottsche

=*Plagiochila neohoweana* Pearson

=*Plagiochila stuartiana* Gottsche

Plagiochila subfasciculata Colenso

Plagiochila sydneyensis Beauverd

=*Plagiochila remyana* Steph.

Plagiochila teysmannii Sande Lac.

=*Plagiochila multifurcata* Steph.

Plagiochila vampira M.A.M.Renner

Plagiochila vitiensis Mitt.

=*Plagiochila brotheri* Steph.

Pseudolepicoleaceae Fulford & J.Taylor

Isophyllaria E.A.Hodgs. & Allison (1)

Isophyllaria attenuata (Rodway) E.A.Hodgs.

=*Isotachis attenuatus* Rodway

Temnoma Mitt. (3)

Temnoma palmatum (Lindb. ex Pearson) R.M.Schust.

=*Blepharostoma palmatum* Lindb. ex Pearson

Temnoma palmatum var. *palmatum*

Temnoma quadripartitum (Hook.) Mitt.

=*Jungermannia quadripartitum* Hook.

Temnoma quadripartium var. *quadripartitum*

Temnoma townrowiorum R.M.Schust.

Porellales Schljakov

Porellineae R.M.Schust.

Lepidolaenaceae Nakai

Gackstroemia Trevis. (2)

Gackstroemia alpina R.M.Schust.

Gackstroemia weindorferi (Herzog) Grolle

=*Lepidolaena weindorferi* Herzog

Lepidolaena Dumort. (5)

Lepidolaena brachyclada (Taylor ex Lehm.) Trevis.

=*Frullania brachyclada* Lehm.

=*Jungermannia brachyclada* Taylor ex Lehm.

Lepidolaena clavigera (Hook.) Dumort. ex Trevis.

=*Jungermannia clavigera* Hook.

Lepidolaena fissistipula (Steph.) Grolle

=*Frullania fissistipula* Steph.

Lepidolaena reticulata (Hook.f. & Taylor) Trevis.

=*Jungermannia reticulata* Hook.f. & Taylor

Lepidolaena taylorii (Gottsche) Trevis.
=*Polyotus taylorii* Gottsche
Porellaceae Cavers
Porella L. (2)
Porella crawfordii Steph.
=*Madotheca crawfordii* (Steph.) Steph.
=*Madotheca godofriediana* Gottsche
=*Madotheca queenslandica* Steph.
=*Porella queenslandica* (Steph.) S.Hatt.
Porella elegantula (Mont.) E.A.Hodgs.
=*Madotheca elegantula* Mont.
=*Madotheca stangeri* Lindenb. & Gottsche
Radulineae R.M.Schust.
Radulaceae Mull.Frib.
Radula Dumort. (39)
Radula acutiloba Steph.
=*Radula papulosa* Steph.
Radula aneurismalis (Hook.f. & Taylor) Nees ex Gottsche, Lindenb. & Nees
=*Jungermannia aneurismalis* Hook.f. & Taylor
=*Radula compacta* Castle
Radula anisotoma M.A.M.Renner
Radula australiana K.Yamada
Radula buccinifera (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees
=*Jungermannia buccinifera* Hook.f. & Taylor
=*Radula wattsiana* Steph.
Radula demissa M.A.M.Renner
Radula forficata M.A.M.Renner
Radula hicksiae K.Yamada
Radula imposita M.A.M.Renner
Radula javanica Gottsche
Radula jovetiana K.Yamada
Radula kilgourii M.A.M.Renner
Radula lingulata Gottsche
Radula loriana Castle
Radula madagascariensis Gottsche
Radula mittenii Steph.
Radula multiamentula E.A.Hodgs.
Radula myriopoda M.A.M.Renner
Radula notabilis M.A.M.Renner
Radula novae-hollandiae Hampe
Radula nymanii Steph.
Radula ocellata K.Yamada
Radula oreopsis M.A.M.Renner
Radula ornata E.A.Br. & Pócs
Radula patens K.Yamada
Radula psychosis M.A.M.Renner
Radula pugioniformis M.A.M.Renner
Radula pulchella Mitt. ex Steph.
Radula queenslandica K.Yamada
Radula ratkowskyana K.Yamada
Radula retroflexa Taylor
=*Radula fauciloba* Steph.
Radula robinsonii Steph.
=*Radula parvitexta* Steph.
Radula sainsburyana E.A.Hodgs. & Allison
Radula squarrosa K.Yamada
Radula strangulata Hook.f. & Taylor
Radula tasmanica Steph.
Radula thiersiae K.Yamada
Radula tonitrua Pócs & M.A.M.Renner
Radula weymouthiana Steph.
Jubulineae Mull.Frib.
Frullaniaceae Lorch
Frullania Raddi (63)
Frullania allanii E.A.Hodgs.
Frullania alternans Nees
Frullania apiculata (Reinw., Blume & Nees) Dumort.
=*Frullania apiculata* var. *apiculata*
=*Frullania apiculata* var. *parva* S.Hatt.
=*Jungermannia apiculata* Reinw., Blume & Nees
Frullania aterrima (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees
=*Frullania weymouthiana* Steph.
=*Jungermannia aterrima* Hook.f. & Taylor
Frullania baileyana Steph.
Frullania belmorensis Steph.
Frullania cataractarum Steph.
Frullania clavata (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees
=*Frullania cinnamomea* Carrington & Pearson
=*Jungermannia clavata* Hook.f. & Taylor
Frullania crassitexta Steph.
Frullania crawfordii Steph.
Frullania crispata Steph.
Frullania deplanata Mitt.
=*Frullania grayana* Steph.
Frullania ericoides (Nees) Mont.
=*Jungermannia ericoides* Nees
=*Jungermannia squarrosa* Reinw., Blume & Nees
Frullania exigua Steph.
Frullania falciloba Taylor ex Lehm.
=*Frullania asperifolia* Steph.
=*Frullania binominata* Steph.
=*Frullania excisula* Steph.
=*Frullania forsythiana* Steph.
=*Frullania knightiana* Steph.
=*Frullania mooreana* Steph.
=*Frullania wattsiana* Steph.
=*Jungermannia falciloba* Hook.f. & Taylor
Frullania ferdinandi-muelleri Steph.
Frullania flexuosa S.Hatt.
Frullania fugax (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees
=*Jungermannia fugax* Hook.f. & Taylor
Frullania fulfordiae S.Hatt.
Frullania hamaticoma Steph.
Frullania hattorii Konrat & Braggins
Frullania hicksiae S.Hatt.
Frullania hicksiae f. *hicksiae*
Frullania hicksiae f. *litoralis* S.Hatt.
Frullania howeana Steph.

Frullania hypoleuca Nees
=*Frullania australis* Steph.
Frullania incumbens Mitt.
Frullania johnsonii Steph.
=*Frullania hasskarliana* var. *queenslandica* S.Hatt.
Frullania klotszchii Nees ex Steph.
Frullania latogaleata Herzog
Frullania meyeniana Lindenb.
Frullania monocera (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees
=*Jungermannia monocera* Hook.f. & Taylor
Frullania monocera var. *depauperata* S.Hatt.
=*Frullania hampeana* Nees
Frullania monocera var. *monocera*
=*Frullania grossiloba* Steph.
Frullania monocera var. *subhampeana* (E.A.Hodgs.) Hentschel & von Konrat
=*Frullania subhampeana* E.A.Hodgs.
Frullania multilacera Steph.
Frullania multilacera subsp. *gracilior* S.Hatt.
Frullania multilaceroides S.Hatt.
Frullania neosheana S.Hatt.
Frullania nodulosa (Reinw., Blume & Nees) Nees
=*Jungermannia nodulosa* Reinw., Blume & Nees
Frullania nodulosa var. *nodulosa*
Frullania nodulosa var. *plana* Schiffn.
Frullania pallidula S.Hatt.
Frullania pauciramea Steph.
Frullania pauciramea var. *pauciramea*
Frullania pentapleura Taylor
=*Frullania pentapleura* subsp. *pentapleura*
=*Frullania wildii* Steph.
Frullania probosciphora Taylor
=*Frullania falsa* Steph.
=*Frullania maccrantica* Gottsche
=*Frullania maccreana* F.Muell. ex Steph.
=*Frullania pentapleura* subsp. *falsa* (Steph.) S.Hatt.
=*Frullania reptans* Mitt.
Frullania pycnantha (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees
=*Jungermannia pycnantha* Hook.f. & Taylor
Frullania queenslandica Steph.
Frullania repandistipula Sande Lac.
Frullania repandistipula subsp. *queenslandica* S.Hatt.
Frullania rostrata (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees
=*Frullania diplota* Taylor
=*Frullania junghuhniana* subsp. *wattsii* S.Hatt.
=*Frullania megalocarpa* Taylor
=*Frullania minutistipula* Steph.
=*Jungermannia congesta* Hook.f. & Taylor
=*Jungermannia rostrata* Hook.f. & Taylor
Frullania rubella Gottsche ex Steph.
Frullania rubella var. *elongata* (Steph.) S.Hatt.
=*Frullania elongata* Steph.
Frullania rubella var. *rubella*
=*Frullania filipendula* Steph.
Frullania schusteri S.Hatt.
Frullania scottiana S.Hatt.
Frullania seriata Gottsche ex Steph.
=*Frullania dietrichiana* Steph.
=*Frullania difficilis* Steph.
Frullania serrata Gottsche
=*Frullania ballinensis* Steph.
Frullania setchellii Pearson
=*Frullania engelii* S.Hatt.
Frullania sheana S.Hatt.
Frullania simmondsii Steph.
Frullania sinskeana J.J.Engel & B.C.Tan
=*Frullania spathulistipa* Steph.
Frullania spinifera Taylor
Frullania spinigastria S.Hatt.
Frullania squarrosula (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees
=*Jungermannia squarrosula* Hook.f. & Taylor
Frullania steereana S.Hatt.
Frullania streimannii S.Hatt.
Frullania subincumbens S.Hatt.
Frullania subtropica Steph.
Frullania ternatensis Gottsche
Frullania ternatensis var. *nonappendiculata* S.Hatt.
Frullania thiersiae S.Hatt.
Frullania victoriensis Steph.
Frullania vittiana S.Hatt.
Frullania yorkiana Steph.

Jubulaceae H.Klinggr.
Jubula Dumort. (1)
Jubula hutchinsiae (Hook.) Dumort.
=*Jungermannia hutchinsiae* Hook.
Jubula hutchinsiae subsp. *australiae* Pócs & Cairns

Lejeuneaceae Cavers
Schiffneriolejeunea Verd. (2)
Schiffneriolejeunea pulopenangensis (Gottsche) Gradst.
=*Phragmicoma pulopenangensis* Gottsche
Schiffneriolejeunea tumida (Nees) Gradst.
=*Ptychanthus tumidus* Nees
Schiffneriolejeunea tumida var. *hasskarliana* (Gottsche) Gradst. & Terken
=*Phragmicoma hasskarliana* Gottsche
Acrolejeunea (Spruce) Steph. (3)
Acrolejeunea arcuata (Nees) Grolle & Gradstein
=*Jungermannia arcuata* Nees
Acrolejeunea arcuata subsp. *gradsteinii* M.A.M.Renner
Acrolejeunea aulacophora (Mont.) Steph.
=*Phragmicoma aulacophora* Mont.
=*Ptychocoleus aulacophorus* (Mont.) Trevis.
Acrolejeunea pycnoclada (Taylor) Schiffn.
=*Ptychanthus pycnocladus* Taylor
Acrolejeunea pycnoclada subsp. *pycnoclada*
Acrolejeunea securifolia (Nees) Steph. & Watts
=*Jungermannia securifolia* Nees
=*Lejeunea wildii* Steph.
Acrolejeunea securifolia subsp. *securifolia*
=*Acrolejeunea wildii* Steph. ex Watts

=*Ptychocoleus parvus* Steph.
=*Ptychocoleus wildii* (Steph. ex Watts) Steph.
Lopholejeunea (Spruce) Steph. (9)
=*Lejeunea* (*Lopholejeunea*) Spruce
Lopholejeunea eulopha (Taylor) Schiffn.
=*Lejeunea eulopha* Taylor
=*Lejeunea fimbriata* Gottsche
=*Lejeunea fimbriata* Gottsche
=*Lopholejeunea fimbriata* (Gottsche) Schiffn.
=*Lopholejeunea norfolkiensis* Steph.
=*Lopholejeunea norfolkiensis* Steph.
=*Phragmicoma eulopha* (Taylor) Mitt.
Lopholejeunea herzogiana Verd.
Lopholejeunea hispidissima Steph.
Lopholejeunea javanica (Nees) Schiffn.
=*Lejeunea javanica* Nees
Lopholejeunea loheri Steph.
Lopholejeunea muelleriana (Gottsche) Schiffn.
=*Lejeunea muelleriana* Gottsche
=*Lopholejeunea muelleriana* (Gottsche) Steph.
Lopholejeunea muelleriana var. *australis* (Steph.) B.M.Thiers & Gradst.
=*Lopholejeunea australis* Steph.
Lopholejeunea muelleriana var. *muelleriana*
Lopholejeunea nigricans (Lindenb.) Schiffn.
=*Lejeunea nigricans* Lindenb.
Lopholejeunea streimannii B.M.Thiers & Gradst.
Lopholejeunea subfusca (Nees) Schiffn.
=*Jungermannia subfusca* Nees
=*Lejeunea subfusca* (Nees) Nees & Mont.
=*Symbiezidium subfuscum* (Nees) Trevis.
Ptychanthus Nees (1)
Ptychanthus striatus (Lehm. & Lindenb.) Nees
=*Jungermannia striata* Lehm.
Spruceanthus Verd. (4)
Spruceanthus planiusculus (Mitt.) X.Q.Shi, R.L.Zhu & Gradst.
=*Archilejeunea planiuscula* (Mitt.) Steph.
=*Lejeunea planiuscula* Mitt.
Spruceanthus polymorphus (Sande Lac.) Verdoorn
=*Archilejeunea polymorpha* (Sande Lac.) B.M.Thiers & Gradst.
=*Phragmicoma polymorpha* Sande Lac.
Spruceanthus semirepandus (Nees) Verd.
=*Jungermannia* semirepanda Nees
Spruceanthus thozetianus (Gottsche & F.Muell.) B.M.Thiers & Gradst.
=*Archilejeunea robusta* (Steph.) Verd.
=*Brachiolejeunea brotheri* Steph. ex Bonner
=*Brachiolejeunea plagiochiloides* Steph. & Spruce ex Steph.
=*Brachiolejeunea plagiochiloides* Steph. & Spruce
=*Brachiolejeunea robusta* Steph.
=*Mastigolejeunea phaea* Gottsche ex Schiffn.
=*Phragmicoma eavesiana* Gottsche & F.Muell.
=*Phragmicoma keppelina* Gottsche & F.Muell.
=*Phragmicoma thozetiana* Gottsche & F.Muell.
Thysananthus Lindenb. (12)
Thysananthus (*Mastigolejeunea*) (Spruce) Sukkharak & Gradst.
=*Lejeunea* (*Mastigolejeunea*) Spruce
=*Mastigolejeunea* (Spruce) Steph.
=*Dendrolejeunea* (Spruce) Lacout.
=*Lejeunea* (*Dendrolejeunea*) Spruce
Thysananthus australis (Steph.) B.M.Thiers & Gradst.
=*Archilejeunea australis* Steph.
Thysananthus calcaratus (Steph.) Sukkharak & Gradst.
=*Archilejeunea calcarata* Steph.
=*Mastigolejeunea calcarata* (Steph.) Verd.
Thysananthus convolutus Lindenb.
Thysananthus frauenfeldii Reichardt
=*Mastigolejeunea undulata* Gradst. & Grolle
Thysananthus fruticosus (Lindenb. & Gottsche) Schiffn.
=*Dendrolejeunea fruticosa* (Lindenb. & Gottsche) Lacout.
Thysananthus humilis (Gottsche) Sukkharak & Gradst.
=*Mastigolejeunea humilis* (Gottsche) Schiffn.
=*Phragmicoma humilis* Gottsche
Thysananthus indicus (Steph.) Sukkharak & Gradst.
=*Mastigolejeunea indica* Steph.
=*Thysananthus integrifolius* Steph.
Thysananthus ligulatus (Lehm. & Lindenb.) Sukkharak & Gradst.
=*Mastigolejeunea ligulata* (Lehm. & Lindenb.) Schiffn.
Thysananthus repletus (Taylor) Sukkharak & Gradstein
=*Lejeunea repleta* Taylor
=*Mastigolejeunea repleta* (Taylor) A.Evans
Thysananthus retusus (Reinw., Blume & Nees) B.M.Thiers & Gradst.
=*Jungermannia retusa* Reinw., Blume & Nees
=*Thysananthus planus* Sande Lac.
Thysananthus spathulistipus (Reinw., Blume & Nees) Lindenb.
=*Jungermannia spathulistipa* Reinw., Blume & Nees
Thysananthus virens Angstr.
=*Mastigolejeunea virens* (Angstr.) Steph.
Stictolejeunea (Spruce) Schiffn. (1)
=*Lejeunea* (*Stictolejeunea*) Spruce
Stictolejeunea balfourii (Mitt.) E.W.Jones
=*Lejeunea balfourii* Mitt.
Stictolejeunea balfourii var. *balfourii*
=*Stictolejeunea richardsii* Herzog
Caudalejeunea Steph. ex Schiffn. (4)
Caudalejeunea cristiloba (Steph.) Gradst.
=*Acrolejeunea cristiloba* Steph.
=*Ptychocoleus cristilobus* (Steph.) Steph.
Caudalejeunea lessonii Steph.
Caudalejeunea recurvistipula (Gottsche) Schiffn.
=*Lejeunea recurvistipula* Gottsche
=*Caudalejeunea reniloba* (Gottsche) Steph.
=*Phragmicoma reniloba* Gottsche
Allorgella Tixier (2)
Allorgella australiensis (B.M.Thiers) Bechteler, G.E.Lee, Schäf.-Verw. & Heinrichs
=*Otolejeunea australiensis* B.M.Thiers
Allorgella semperiana (Gottsche ex Steph.) Bechteler, G.E.Lee, Schäf.-Verw. & Heinrichs
=*Otolejeunea semperiana* (Gottsche ex Steph.) Grolle
=*Prionolejeunea semperiana* Gottsche ex Steph.

Cheilolejeunea (Spruce) Steph. (25)

=*Leucolejeunea* A.Evans

Cheilolejeunea albovirens (Hook.f. & Taylor) E.A.Hodgs.

=*Jungermannia albovirens* Hook.f. & Taylor

Cheilolejeunea campbelliensis (Steph.) R.M.Schust.

=*Cheilolejeunea celata* M.A.M.Renner & Glenny

=*Strepsilejeunea campbelliensis* Steph.

Cheilolejeunea ceylanica (Gottsche) R.M.Schust. & Kachroo

=*Lejeunea ceylanica* Gottsche

Cheilolejeunea clavata Mizut.

Cheilolejeunea comitans (Hook.f. & Taylor) R.M.Schust.

=*Lejeunea comitans* Hook.f. & Taylor

=*Strepsilejeunea comitans* (Hook.f. & Taylor) Steph.

Cheilolejeunea decursiva (Sande Lac.) R.M.Schust.

=*Cheilolejeunea spathulata* Mizut.

=*Cheilolejeunea tisserantii* Vanden Berghen & Jovet-Ast

=*Lejeunea decursiva* Sande Lac.

=*Trachylejeunea oahuensis* A.Evans

Cheilolejeunea falsinervis (Sande Lac.) Kachroo & R.M.Schust.

=*Lejeunea falsinervis* Sande Lac.

=*Pycnolejeunea falsinervis* (Sande Lac.) Schiffn.

Cheilolejeunea gardneri (Mitt.) Mizut.

=*Lejeunea gardneri* Mitt.

Cheilolejeunea hallingii B.M.Thiers

Cheilolejeunea incisa (Gottsche, Lindenb. & Nees) R.M.Schust. & Kachroo

=*Lejeunea incisa* Gottsche, Lindenb. & Nees

Cheilolejeunea incisa var. *teretiflora* B.M.Thiers

Cheilolejeunea intertexta (Lindenb.) Steph.

=*Lejeunea intertexta* Lindenb.

Cheilolejeunea longidens (Steph.) R.M.Schust. & Kachroo

=*Pycnolejeunea longidens* Steph.

Cheilolejeunea meyeniana (Gottsche, Lindenb. & Nees) R.M.Schust. & Kachroo

=*Lejeunea meyeniana* Gottsche, Lindenb. & Nees

=*Pycnolejeunea wattsiana* Steph.

Cheilolejeunea mimosa (Hook.f. & Taylor) R.M.Schust.

=*Cheilolejeunea hobartiensis* Pearson

=*Cheilolejeunea implexicaulis* (Hook.f. & Taylor) R.M.Schust.

=*Cheilolejeunea weymouthiana* Steph.

=*Jungermannia implexicaulis* Hook.f. & Taylor

=*Jungermannia mimosa* Hook.f. & Taylor

=*Lejeunea implexicaulis* (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

=*Lejeunea mimosa* (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

=*Strepsilejeunea austrina* Spruce ex Steph.

=*Strepsilejeunea austrina* Spruce ex Watts

=*Strepsilejeunea mimosa* (Hook.f. & Taylor) Steph.

Cheilolejeunea norrisii (Grolle) M.A.M.Renner

=*Lejeunea norrisii* Grolle

*Cheilolejeunea occlusa (*Herzog) T. Kodama & N. Kitag.

=*Strepsilejeunea occlusa* Herzog

Cheilolejeunea oscilla M.A.M.Renner

Cheilolejeunea parvidens B.M.Thiers

Cheilolejeunea serpentina (Mitt.) Mizut.

=*Lejeunea serpentina* Mitt.

Cheilolejeunea streimannii Pócs & Ninh

Cheilolejeunea trapezia (Nees) Kachroo & R.M.Schust.

=*Cheilolejeunea imbricata* (Nees) S.Hatt.

=*Jungermannia thymifolia* var. imbricata Nees

=*Jungermannia trapezia* Nees

=*Lejeunea imbricata* (Nees) Nees

=*Pycnolejeunea curvatiloba* Steph.

Cheilolejeunea trifaria (Reinw., Blume & Nees) Mizut.

=*Euosmolejeunea baileyana* Steph.

=*Jungermannia trifaria* Reinw., Blume & Nees

Cheilolejeunea ventricosa (Schiffn.) X.-L.He

=*Pycnolejeunea fitzgeraldii* Steph.

=*Pycnolejeunea ventricosa* Schiffn. ex P.Syd.

=*Pycnolejeunea ventricosa* Schiffn.

Cheilolejeunea vittata (Steph. ex Hoffm.) R.M.Schust. & Kachroo

=*Pycnolejeunea vittata* Steph. ex G.Hoffm.

Cheilolejeunea xanthocarpa (Lehm. & Lindenb.) Malombe

=*Jungermannia xanthocarpa* Lehm. & Lindenb.

=*Leucolejeunea xanthocarpa* (Lehm. & Lindenb.) A.Evans

Pycnolejeunea (Spruce) Schiffn. (1)

=*Lejeunea* (*Pycnolejeunea*) Spruce

=*Jungermannia contigua* Nees

Pycnolejeunea grandiocellata Steph.

Leptolejeunea (Spruce) Schiffn. (10)

=*Lejeunea* (*Leptolejeunea*) Spruce

Leptolejeunea australis Steph.

Leptolejeunea denticulata Steph.

Leptolejeunea epiphylla (Mitt.) Steph.

=*Lejeunea epiphylla* Mitt.

Leptolejeunea maculata (Mitt.) Schiffn.

=*Lejeunea maculata* Mitt.

Leptolejeunea picta Herzog

Leptolejeunea rhombifolia Steph.

Leptolejeunea rosulans Steph.

Leptolejeunea schiffneri (Steph. ex Schiffn.) Steph.

=*Lejeunea schiffneri* Steph. ex Schiffn.

Leptolejeunea subrotundifolia Herzog

Leptolejeunea tripuncta (Mitt.) Steph.

=*Lejeunea tripuncta* Mitt.

=*Leptolejeunea* serratula Herzog

Ceratolejeunea (Spruce) Jack & Steph. (1)

Ceratolejeunea belangeriana (Gottsche) Steph.

=*Ceratolejeunea oceanica* (Mitt.) Steph.

=*Lejeunea belangeriana* Gottsche

=*Lejeunea oceanica* Mitt.

Lejeunea Lib. (26)

=*Eulejeunea* Steph.

=*Rectolejeunea* A.Evans

=*Stenolejeunea* R.M.Schust.

=*Taxilejeunea* (Spruce) Steph.

Lejeunea aloba Sande Lac.

Lejeunea anisophylla Mont.

=*Lejeunea catanduana* (Steph.) H.A.Mill.

=*Microlejeunea catanduana* Steph.

Lejeunea apiculata Sande Lac.

=*Stenolejeunea apiculata* (Sande Lac.) R.M.Schust.

Lejeunea armitii (Steph.) Steph.
=*Eulejeunea armitii* Steph.
Lejeunea caespitosa Lindenb.
Lejeunea cocoes Mitt.
Lejeunea cuspidistipula (Steph.) Steph.
=*Cheilolejeunea richmondiana* Watts
=*Eulejeunea cuspidistipula* Steph.
=*Rectolejeunea richmondensis* Steph.
Lejeunea denticalyx (Steph.) Steph.
=*Eulejeunea denticalyx* Steph.
Lejeunea discreta Lindenb.
=*Lejeunea discreta* var. *discreta*
Lejeunea drummondii Taylor
=*Cheilolejeunea gunniana* (Mitt.) Steph.
=*Eulejeunea drummondii* (Taylor) Steph.
=*Eulejeunea tumida* f. *parvilobula* Rodway
=*Lejeunea gunniana* Mitt.
=*Lejeunea tasmanica* Gottsche
Lejeunea exilis (Reinw., Blume & Nees) Grolle
=*Jungermannia exilis* Reinw., Blume & Nees
Lejeunea flava (Sw.) Nees
=*Cheilolejeunea muscicola* Steph.
=*Jungermannia flava* Sw.
=*Lejeunea rara* Steph.
=*Lejeunea sinclairii* Spruce
Lejeunea flava subsp. *flava*
=*Jungermannia thymifolia* Nees
Lejeunea flava subsp. *orientalis* R.M.Schust.
Lejeunea gracilipes (Taylor) Spruce
=*Hygrolejeunea norfolkiensis* (Steph.) Steph.
=*Lejeunea discreta* var. *gracilipes* (Taylor) G.E.Lee & Heinrichs
=*Lejeunea norfolkiensis* Steph.
=*Omphalanthus gracilipes* Taylor
Lejeunea herzogii Mizut.
=*Cheilolejeunea pterota* Herzog
Lejeunea howeana Grolle
=*Cheilolejeunea wattsiana* Steph.
Lejeunea lumbricoides (Nees) Nees
=*Hygrolejeunea rostrata* Steph.
=*Jungermannia lumbricoides* Nees
Lejeunea microloba Taylor
=*Taxilejeunea convexa* Steph.
Lejeunea patriciae Schäfer-Verwimp
=*Lejeunea pilifera* Tixier
Lejeunea perichymidia M.A.M.Renner
=*Lejeunea epiphylla* Colenso
Lejeunea primordialis (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees
=*Jungermannia primordialis* Hook.f. & Taylor
=*Microlejeunea primordialis* (Hook.f. & Taylor) Steph.
Lejeunea ramosissima Steph.
Lejeunea reflexistipula (Lehm. & Lindenb.) Lehm. & Lindenb. ex Gottsche, Lindenb. & Nees
=*Jungermannia reflexistipula* Lehm. & Lindenb.
Lejeunea sordida (Nees) Mont.
=*Hygrolejeunea sacculifera* Steph.
=*Jungermannia sordida* Nees
Lejeunea stenodentata M.A.M.Renner & Pócs
=*Drepanolejeunea dentata* Steph.
=*Stenolejeunea dentata* (Steph.) Pócs
Lejeunea subelobata Carrington & Pearson
Lejeunea wattsiana (Steph.) H.A.Mill., Bonner & Bischl.
=*Microlejeunea wattsiana* Steph.

Microlejeunea (Spruce) Steph. (8)
=*Lejeunea* (*Microlejeunea*) Spruce
Microlejeunea bischlerae (B.M.Thiers) B.M.Thiers
=*Lejeunea bischlerae* B.M.Thiers
Microlejeunea filicuspis (Steph.) Heinrichs, Schäf.-Verw., Pócs & S.Dong
=*Drepanolejeunea filicuspis* Steph.
=*Harpalejeunea filicuspis* (Steph.) Mizut.
Microlejeunea gracillima (Mitt.) Steph.
Microlejeunea latitans (Hook.f. & Taylor) Heinrichs, Schäf.-Verw., Pócs & S.Dong
=*Harpalejeunea latitans* (Hook.f. & Taylor) Grolle
=*Jungermannia latitans* Hook.f. & Taylor
=*Lejeunea latitans* (Hook.f. & Taylor) Gottsche, Lindenb. & Nees
Microlejeunea punctiformis (Taylor) Steph.
=*Lejeunea punctiformis* Taylor
Microlejeunea spinosa (Mizut.) Grolle
=*Harpalejeunea spinosa* Mizut.
Microlejeunea ulicina (Taylor) Steph.
=*Jungermannia ulicina* Taylor
=*Lejeunea gracillima* Mitt.
=*Microlejeunea gracillima* (Mitt.) Steph.
Microlejeunea wallichiana (Lehm.) R.L.Zhu & Y.M.Wei
=*Jungermannia wallichiana* Lehm.
=*Lejeunea wallichiana* (Lehm.) Lehm.

Lepidolejeunea R.M.Schust. (3)
Lepidolejeunea bidentula (Steph.) R.M.Schust.
=*Hygrolejeunea sayeri* Steph.
=*Pycnolejeunea bidentula* Steph.
Lepidolejeunea integristipula (J.B.Jack & Steph.) R.M.Schust.
=*Pycnolejeunea integristipula* J.B.Jack & Steph.
Lepidolejeunea queenslandica B.M.Thiers
=*Rectolejeunea queenslandica* (B.M.Thiers) X.-L.He

Metalejeunea Grolle (1)
Metalejeunea cucullata (Reinw., Blume & Nees) Grolle
=*Jungermannia cucullata* Reinw., Blume & Nees
=*Lejeunea cucullata* (Reinw., Blume & Nees) Nees

Cumulolejeunea R.L.Zhu & L.Shu (1)
Cumulolejeunea ocellata (Herzog) R.L.Zhu & L.Shu
=*Microlejeunea ocellata* (Herzog) Grolle
=*Rectolejeunea ocellata* Herzog

Drepanolejeunea (Spruce) Steph. (15)
=*Lejeunea* (*Drepanolejeunea*) Spruce
Drepanolejeunea aucklandica Steph.
Drepanolejeunea dactylophora (Gottsche, Lindenb. & Nees) J.B.Jack & Steph.
=*Lejeunea dactylophora* Gottsche, Lindenb. & Nees
Drepanolejeunea grossidens Steph.
Drepanolejeunea hampeana Steph.
Drepanolejeunea intermedia Zwickel

Drepanolejeunea levicornua Steph.
=*Drepanolejeunea levicornua* var. *levicornua*
Drepanolejeunea longicornua (Herzog) Mizut.
=*Drepanolejeunea levicornua* var. *longicornua* Herzog
Drepanolejeunea obliqua Steph.
Drepanolejeunea pentadactyla (Mont.) Steph.
=*Drepanolejeunea micholitzii* var. *genuina* Herzog
=*Drepanolejeunea micholitzii* var. *micholitzii*
=*Drepanolejeunea micholitzii* Steph.
=*Lejeunea pentadactyla* Mont.
Drepanolejeunea serricalyx Herzog
Drepanolejeunea tenera K.I.Goebel
Drepanolejeunea tenuis (Nees) J.B.Jack & Steph.
=*Jungermannia cucullata* tenuis Nees
=*Lejeunea tenuis* (Nees) Nees
Drepanolejeunea ternatensis (Gottsche) Steph. ex Schiffn.
=*Lejeunea ternatensis* Gottsche
Drepanolejeunea ternatensis var. *lancispina* Herzog
Drepanolejeunea ternatensis var. *ternatensis*
Drepanolejeunea tricornua Herzog
Drepanolejeunea vesiculosa (Mitt.) Steph.
=*Lejeunea vesiculosa* Mitt.
Diplasiolejeunea (Spruce) Schiffn. (2)
=*Lejeunea* (*Diplasiolejeunea*) Spruce
Diplasiolejeunea cavifolia Steph.
Diplasiolejeunea plicatiloba (Hook.f. & Taylor) Grolle
=*Jungermannia plicatiloba* Hook.f. & Taylor
=*Lejeunea lyratifolia* Hook.f. & Taylor
Cololejeunea (Spruce) Steph. (41)
=*Aphanolejeunea* A.Evans
=*Lejeunea* (*Cololejeunea*) Spruce [subgenus]
Cololejeunea amphibola B.M.Thiers
=*Aphanolejeunea amphibola* (B.M.Thiers) Pócs & Bernecker
Cololejeunea appressa (A.Evans) Benedix
=*Leptocolea appressa* A.Evans
Cololejeunea cairnsiana Pócs
Cololejeunea cardiocarpa (Mont.) A.Evans
=*Lejeunea cardiocarpa* Mont.
Cololejeunea cordiflora Steph.
Cololejeunea diaphana A.Evans
Cololejeunea diaphana var. *cristulata* R.M.Schust.
Cololejeunea elizabethae Meagher & Pócs
Cololejeunea falcata (Horik.) Benedix
=*Physocolea falcata* Horik.
Coloelejeunea falcata var. *falcata*
Cololejeunea floccosa (Lehm. & Lindenb.) Steph.
=*Jungermannia floccosa* Lehm. & Lindenb.
Cololejeunea floccosa var. *amoenoides* Tixier
Cololejeunea floccosa var. *floccosa*
Cololejeunea floccosa var. *fraseriana* Pócs
Cololejeunea gottschei (Steph.) Pande, K.P.Srivast. & Ahmad
Cololejeunea hamata Steph.
=*Cololejeunea bistyla* Steph.
Cololejeunea haskarliana (Lehm.) Schiffn.
=*Cololejeunea baueriana* Schiffn.
=*Lejeunea haskarliana* Lehm.
=*Lejeunea venusta* Sande Lac.
=*Leptocolea pallida* Steph.
Cololejeunea heinari Pócs
Cololejeunea inflata Steph.
=*Physocolea oshimensis* Horik.
Cololejeunea inflectans (Mitt.) Benedix
=*Cololejeunea peculiaris* (Herzog) Benedix
=*Lejeunea inflectens* Mitt.
=*Physocolea peculiaris* Herzog
Cololejeunea iwatsukiana (Pócs) Pócs
=*Aphanolejeunea iwatsukiana* Pócs
Cololejeunea kapingaensis H.A.Mill.
Cololejeunea laevigata (Steph.) R.M.Schust.
=*Lejeunea laevigata* Mitt.
=*Physocolea laevigata* Steph.
Cololejeunea lanciloba Steph.
=*Cololejeunea wattsiana* (Steph.) R.M.Schust.
=*Leptocolea wattsiana* Steph.
Cololejeunea longifolia (Mitt.) Benedix ex Mizut
=*Lejeunea longifolia* Mitt.
Cololejeunea mamillata (Angstr.) E.A.Hodgs.
=*Lejeunea mamillata* Angstr.
Cololejeunea maritima Tixier
Cololejeunea obliqua (Nees & Mont.) Schiffn.
=*Lejeunea obliqua* Nees & Mont.
Cololejeunea ocelloides (Horik.) Mizut.
=*Leptocolea ocelloides* Horik.
Cololejeunea papillosa (K.I.Goebel) Mizut.
=*Aphanolejeunea angustissima* Steph.
=*Aphanolejeunea cyathiphylla* Herzog
=*Aphanolejeunea microscopica* var. *borneensis* Herzog
=*Physocolea papillosa* K.I.Goebel
Cololejeunea peraffinis (Schiffn.) Schiffn.
=*Lejeunea peraffinis* Schiffn.
Cololejeunea peraffinis var. *peraffinis*
Cololejeunea planissima (Mitt.) Abeyw.
=*Cololejeunea aoshimensis* (Horik.) S.Hatt.
=*Lejeunea planissima* Mitt.
=*Leptocolea aoshimensis* Horik.
Cololejeunea planissima var. *planissima*
Cololejeunea pseudofloccosa (Horik.) Benedix
=*Leptocolea pseudofloccosa* Horik.
Cololejeunea raduliloba Steph.
Cololejeunea reniformis M.A.M.Renner
Cololejeunea schmidtii Steph.
Cololejeunea sintenisii (Steph.) Pócs
Cololejeunea stylosa Steph.
=*Cololejeunea bokorensis* Tixier
Cololejeunea tenella Benedix
Cololejeunea thiersiae (Pócs) Pócs
=*Aphanolejeunea theirsiae* Pócs
=*Aphanolejeunea thiersiana* Pócs
Cololejeunea triapiculata (Herzog) Tixier
=*Leptocolea triapiculata* Herzog
Cololejeunea trichomanis (Gottsche) Besch.
=*Cololejeunea goebelii* (Gottsche ex Schiffn.) Schiffn.
=*Lejeunea goebelii* Gottsche ex Schiffn.
=*Lejeunea trichomanis* Gottsche

Cololejeunea veillonii Tixier
=*Aphanolejeunea veillonii* (Tixier) Pócs
Cololejeunea verrucosa Steph.
Cololejeunea vidaliana Tixier
Cololejeunea wightii Steph.
=*Cololejeunea norfolkiensis* Steph.
Myriocoleopsis Schiffn. (1)
Myriocoleopsis minutissima (Sm.) R.L.Zhu, Y.Yu & Pócs
=*Cololejeunea minutissima* (Sm.) Schiffn.
=*Jungermannia minutissima* Sm.
Siphonolejeunea Herzog (8)
=*Austrolejeunea* (R.M.Schust.) R.M.Schust.
=*Nephelolejeunea* Grolle
=*Siphonolejeunea* subg. *Austrolejeunea* R.M.Schust.
Siphonolejeunea bidentata (B.M.Thiers) M.A.M.Renner
=*Austrolejeunea bidentata* B.M.Thiers
=*Nephelolejeunea bidentata* (B.M.Thiers) L.Söderstr. & A.Hagborg
Siphonolejeunea elegantissima (Steph.) Grolle
=*Trachylejeunea elegantissima* Steph.
Siphonolejeunea hamata (Grolle) M.A.M.Renner
=*Austrolejeunea hamata* (Grolle) Pócs
=*Nephelolejeunea hamata* Grolle
Siphonolejeunea jarmaniana (Grolle) M.A.M.Renner
=*Austrolejeunea jarmaniana* Grolle
=*Nephelolejeunea jarmaniana* (Grolle) L.Söderstr. & A.Hagborg
Siphonolejeunea nudipes (Hook.f. & Taylor) Herzog
=*Austrolejeunea nudipes* (Hook.f. & Taylor) Grolle
=*Jungermannia nudipes* Hook.f. & Taylor
=*Microlejeunea victoriae* D.J.Carr
Siphonolejeunea occidentalis (Pócs) M.A.M.Renner
=*Austrolejeunea occidentalis* Pócs
Siphonolejeunea olgae R.M.Schust.
=*Austrolejeunea olgae* (R.M.Schust.) R.M.Schust.
Siphonolejeunea schiffneri (Steph. ex Schiffn.) Herzog
=*Pycnolejeunea schiffneri* Steph. ex Schiffn.
Tuyamaella S.Hatt. (1)
Tuyamaella serratistipa S.Hatt.
Colura (Dumort.) Dumort. (17)
=*Colurolejeunea* (Spruce) Steph.
=*Jungermannia* sect. *Colura* Dumort.
Colura acroloba (Mont. ex Steph.) Jovet-Ast
=*Colurolejeunea acroloba* Mont. ex Steph.
=*Lejeunea acroloba* Prantl
Colura apiculata (Schiffn.) Steph.
=*Colurolejeunea apiculata* Schiffn.
Colura ari (Steph.) Steph.
=*Colurolejeunea ari* Steph.
Colura australiensis Jovet-Ast
Colura bisvoluta Herzog & Jovet-Ast
Colura conica (Sande Lac.) K.I.Goebel
=*Colura acutifolia* Jovet-Ast
=*Lejeunea conica* Sande Lac.
Colura corynophora (Gottsche, Lindenb. & Nees) Trevis.
=*Lejeunea corynophora* Gottsche, Lindenb. & Nees
Colura crispiloba Jovet-Ast
Colura herzogii Jovet-Ast
Colura imperfecta Steph.
Colura leratii Steph.
=*Colurolejeunea leratii* Steph.
Colura ornata K.I.Goebel
Colura pulcherrima Jovet-Ast
Colura pulcherrima var. *bartlettii* Jovet-Ast
Colura pulcherrima var. *pulcherrima*
Colura queenslandica B.M.Thiers
Colura saccophylla E.A.Hodgs. & Herzog
Colura simplicior Jovet-Ast
Colura streimannii Pócs

Excluded taxa

The species listed below have been excluded from Australia since the checklist published by McCarthy (2003).

Acrobolbus perpusillus (Colenso) Briscoe
=*Tylimanthus perpusillus* Colenso
Acrobolbus saccatus (Hook.) Trevis.
=*Jungermannia saccata* Hook.
=*Tylimanthus saccatus* (Hook.) Mitt.
Acrobolbus viridis (Mitt.) Briscoe & J.J.Engel
=*Tylimanthus viridis* Mitt.
Acromastigum anisostomum (Lehm. & Lindenb.) A.Evans
=*Jungermannia anisostoma* Lehm. & Lindenb.
Acromastigum cunninghamii (Steph.) A.Evans
=*Bazzania cunninghamii* Steph.
Acromastigum echinatum (Gottsche) A.Evans
=*Bazzania echinata* (Gottsche) Trevis.
=*Mastigobryum echinatum* Gottsche
Acromastigum integrifolium (Austin) A.Evans
=*Mastigobryum integrifolium* Austin
Aneura maxima (Schiffn.) Steph.
=*Riccardia maxima* Schiffn.
Anthoceros adscendens Lehm. & Lindenb.
Anthoceros laminifer Steph.
Asterella elegans (Spreng.) Trevis.
Asterella tenella (L.) P.Beauv.
=*Fimbraria tenella* var. *porphyrocephala* Bisch.
=*Fimbraria tenella* var. *tenella*
=*Fimbraria tenella* (L.) Nees
=*Marchantia tenella* L.
Bazzania morokensis (Steph.) Grolle
=*Mastigobryum morokense* Steph.
Bazzania tridens (Reinw., Blume & Nees) Trevis.
=*Jungermannia tridens* Reinw., Blume & Nees
=*Mastigobryum tridens* (Reinw., Blume & Nees) Nees
Cephaloziella dentata (Raddi) Lindb.
=*Jungermannia dentata* Raddi
Cephaloziella pulcherrima subsp. *pulcherrima* [subspecies]
Cephaloziella verrucosa Steph.
Cheilolejeunea longiloba (Steph. ex G.Hoffm.) Kachroo & R.M.Schust.
=*Pycnolejeunea longiloba* Steph. ex G.Hoffm.
Cheilolejeunea mariana (Gottsche) B.M.Thiers & Gradst.
=*Archilejeunea mariana* (Gottsche) Steph.
=*Lejeunea mariana* Gottsche

Chiastocaulon conjugatum (Hook.) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs

=*Jungermannia conjugata* Hook.

Chiloscyphus bowieanus (Steph.) J.J.Engel & R.M.Schust.

=*Lophocolea bowieana* Steph.

=*Lophocolea bowiena* Steph.

Chiloscyphus calcareus (Steph.) J.J.Engel & R.M.Schust.

=*Lophocolea calcarea* Steph.

Chiloscyphus divaricatus (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

=*Lophocolea divaricata* Hook.f. & Taylor

Chiloscyphus herzogii J.J.Engel & R.M.Schust.

=*Lophocolea decurrens* Herzog

Chiloscyphus latifolius (Nees) J.J.Engel & R.M.Schust.

=*Jungermannia bidentata* L.

=*Lophocolea bidentata* f. *bidentata* [form]

=*Lophocolea latifolia* Nees

Chiloscyphus lentus (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

=*Jungermannia lenta* Hook.f. & Taylor

=*Lophocolea lenta* (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

Chiloscyphus leptanthus (Steph.) J.J.Engel & R.M.Schust.

=*Jungermannia alternifolia* Hook.f. & Taylor

=*Jungermannia leptantha* Hook.f. & Taylor

=*Lophocolea alternifolia* (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

=*Lophocolea leptantha* (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

Chiloscyphus minor (Nees) J.J.Engel & R.M.Schust.

=*Lophocolea minor* Nees

Chiloscyphus polyanthos (L.) Corda

=*Jungermannia polyanthos* L.

Chiloscyphus sabuletorum (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

=*Jungermannia rivalis* Hook.f. & Taylor

=*Lophocolea rivalis* (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

Chiloscyphus subviridis (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

=*Jungermannia subviridis* Hook.f. & Taylor

=*Lophocolea subviridis* (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

Chiloscyphus textilis (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

=*Lophocolea textilis* (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

Cololejeunea microscopica (Taylor) Schiffn.

=*Jungermannia microscopica* Taylor

Corsiniaceae Engl.

Corsinia Raddi

Corsinia coriandrina (Spreng.) Lindb.

=*Corsinia marchantioides* Raddi

Cryptolophocolea pallida (Mitt.) L.Söderstr.

=*Chiloscyphus multipennus* J.J.Engel & R.M.Schust.

=*Chiloscyphus pallidus* (Mitt.) J.J.Engel & R.M.Schust.

=*Jungermannia multipenna* Hook.f. & Taylor

=*Lophocolea erectifolia* Steph.

=*Lophocolea pallida* Mitt.

Cryptolophocolea pallidovirens (Hook.f. & Taylor) L.Söderstr.

=*Chiloscyphus pallidovirens* (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

=*Jungermannia pallidovirens* Hook.f. & Taylor

Dendromastigophora R.M.Schust.

Dendromastigophora flagellifera (Hook.) R.M.Schust.

=*Jungermannia flagellifera* Hook.

Dinckleria fruticella (Hook.f. & Taylor) Heinrichs & J.J.Engel

=*Jungermannia fruticella* Hook.f. & Taylor

=*Plagiochila dicksonii* Hook.f. & Taylor

=*Plagiochila fruticella* (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees

Fossombronia angulosa (Dicks.) Raddi

Fossombronia longiseta (Austin) Austin

Fossombronia leucoxantha (Lehm.) Lehm. & Lindenb.

Frullania dilatata (L.) Dumort.

=*Frullania cranialis* (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

=*Jungermannia dilatata* L.

Frullania gaudichaudii (Nees & Mont.) Nees & Mont. ex Gottsche, Lindenb. & Nees

=*Jubula gaudichaudii* Nees & Mont.

Frullania rostellata Mitt.

Frullania scandens Mont.

Heteroscyphus cuneistipulus (Steph.) Schiffn.

=*Chiloscyphus cuneistipulus* Steph.

Heteroscyphus fissistipus var. *repandus* J.J.Engel

Heteroscyphus lingulatus (Colenso) J.J.Engel & R.M.Schust.

=*Chiloscyphus lingulatus* Colenso

Heteroscyphus lyallii (Mitt.) R.M.Schust.

=*Chiloscyphus lyalli* Mitt.

=*Chiloscyphus trispinosus* Mitt.

Heteroscyphus oblongifolius (Hook.f. & Taylor) Schiffn.

=*Heteroscyphus colensoi* (Mitt.) Schiffn.

=*Jungermannia oblongifolia* Hook.f. & Taylor

Heteroscyphus planiusculus (Hook.f. & Taylor) J.J.Engel

=*Jungermannia planiuscula* Hook.f. & Taylor

Kurzia compacta (Steph.) Grolle

=*Lepidozia compacta* Steph.

Kurzia trilobata (R.M.Schust.) R.M.Schust.

=*Kurzia quadriseta* var. *trilobata* R.M.Schust.

=*Telaranea trilobata* (R.M.Schust.) J.J.Engel & Merrill

Lejeunea angusta (Lehm. & Lindenb.) Mont.

=*Jungermannia angusta* Lehm. & Lindenb.

Lejeunea helmsiana (Steph.) Steph.

=*Eulejeunea helmsiana* Steph.

Lejeunea sinclairii Mitt.

Lejeunea tumida Mitt.

Lepidogyna R.M.Schust.

Lepidogyna hodgsoniae (Grolle) R.M.Schust.

=*Lepidolaena hodgsoniae* Grolle

Lepidolaena palpebrifolia (Hook.) Dumort. ex Trevis.

=*Jungermannia palpebrifolia* Hook.

Lepidozia cupressina (Sw.) Lindenb.

=*Jungermannia cupressina* Sw.

Lepidozia microphylla (Hook.) Lindenb.

=*Jungermannia microphylla* Hook.

Leptolejeunea elliptica (Lehm. & Lindenb.) Besch.
=*Jungermannia elliptica* Lehm. & Lindenb.
Leptolejeunea subacuta Steph. ex A.Evans
Leptoscyphus expansus (Lehm.) Grolle
=*Jungermannia expansa* Lehm.
=*Plagiochila chiloscyphoidea* Lindenb.
Leptoscyphus horizontalis (Hook.) Grolle
=*Jungermannia horizontalis* Hook.
Leptoscyphus physanthus (Hook.f. & Taylor) J.J.Engel
=*Chiloscyphus physanthus* (Hook.f. & Taylor) Mitt.
=*Heteroscyphus physanthus* (Hook.f. & Taylor) R.M.Schust.
=*Jungermannia physantha* Hook.f. & Taylor
=*Lophocolea filicicola* Steph.
Lobatiriccardia alterniloba (Hook.f. & Taylor) Furuki var. *alterniloba*
Lopholejeunea colensoi Steph.
Lopholejeunea plicatiscypha (Hook.f. & Taylor) Steph.
=*Phragmicoma plicatiscypha* Hook.f. & Taylor
Megaceros denticulatus (Lehm.) Steph.
=*Anthoceros denticulatus* Lehm.
Megaceros pellucidus (Colenso) E.A.Hodgs.
=*Anthoceros pellucidus* Colenso
Metzgeria conjugata Lindb.
Monocleaceae Cohn ex Trevis.
Monoclea Hook.
Monoclea forsteri Hook.
Neolepidozia patentissima var. *zebrina* (J.J.Engel & G.L.Merr.) E.D.Cooper
=*Telaranea patentissima* var. *zebrina* J.J.Engel & G.L.Merr.
Neolepidozia praenitens (Lehm. & Lindenb.) E.D.Cooper
=*Jungermannia praenitens* Lehm. & Lindenb.
=*Telaranea praenitens* (Lehm. & Lindenb.) E.A.Hodgs.
Neolepidozia tetradactyla (Hook.f. & Taylor) Fulford & J.Taylor
=*Jungermannia tetradactyla* Hook.f. & Taylor
=*Telaranea tetradactyla* (Hook.f. & Taylor) E.A.Hodgs.
Pallavicinia pseudolyellii R.M.Schust. & J.J.Engel
Pedinophyllum Lindb.
Pedinophyllum monoicum (Steph.) Grolle
=*Plagiochila monoica* Steph.
Plagiochila annotina Menzies ex Lindenb.
Plagiochila chauviniana Mont.
Plagiochila circumdentata Steph.
Plagiochila colensoi Hook.f. & Taylor
=*Plagiochila lyallii* Mitt.
Plagiochila deltoidea Lindenb.
Plagiochila furcata Steph.
Plagiochila gigantea Lindenb.
Plagiochila gregaria (Hook.f. & Taylor) Gottsche, Lindenb. & Nees
=*Jungermannia gregaria* Hook.f. & Taylor
Plagiochila inflata Steph.
Plagiochila microdictyon Mitt.
Plagiochila ramosissima (Hook.) Lindenb.
=*Jungermannia ramosissima* Hook.
Plagiochila renitens (Nees) Lindenb.
=*Jungermannia renitens* Nees
Plagiochila sciophila Nees ex Lindenb.
Plagiochila trapezoidea Lindenb.
Porella viridissima (Mitt.) Grolle
=*Madotheca viridissima* Mitt.
Ptychanthus stephensonianus (Mitt.) Steph.
=*Lejeunea stephensoniana* Mitt.
Pycnolejeunea contigua (Nees) Grolle
Pycnolejeunea densistipula (Lehm. & Lindenb.) Steph.
=*Lejeunea densistipula* Lehm. & Lindenb.
Radula gottscheana Taylor
Radula kurzii Steph.
Radula multiflora Gottsche
Radula physoloba Mont.
Radula plicata Mitt.
Radula reflexa Nees & Mont.
Radula scariosa Mitt.
Radula sharpii K.Yamada
Radula tabularis Steph.
Radula ventricosa Steph.
Riccia discolor Lehm. & Lindenb.
Riccia limbata Bisch.
Schiffneriolejeunea cumingiana (Mont.) Gradst.
=*Phragmicoma cumingiana* Mont.
Schistochila ciliata (Mitt.) Steph.
Schistochila repleta (Hook.f. & Taylor) Steph.
=*Gottschea heterodonta* Colenso
=*Jungermannia repleta* Hook.f. & Taylor
=*Schistochila heterodonta* (Colenso) Steph.
Syzygiella nigrescens (Steph.) Feldberg, Váňa, Hentsche & Heinrichs
=*Cryptochila nigrescens* (Steph.) Grolle
=*Jamesoniella nigrescens* Steph.
Temnoma pulchellum (Hook.) Mitt. ex Bastow
=*Jungermannia pulchella* Hook.
Temnoma quadrifidum (Mitt.) Mitt. ex E.A.Hodgs. & Allison
=*Jungermannia quadrifida* Mitt.
Tetracymbaliella cymbalifera (Hook.f. & Taylor) Grolle
=*Chiloscyphus cymbaliferus* (Hook.f. & Taylor) Gottsche, Lindenb. & Nees
=*Heteroscyphus cymbaliferus* (Hook.f. & Taylor) J.J.Engel & R.M.Schust.
=*Jungermannia cymbalifera* Hook.f. & Taylor
Thysananthus auriculatus (Wilson & Hook) Sukkharak & Gradst.
=*Jungermannia auriculata* Wilson & Hook.
=*Mastigolejeunea auriculata* (Wilson & Hook.) Steph.
Treubia insignis K.I.Goebel
Tricholepidozia pulcherrima (Steph.) E.D.Cooper var. *pulcherrima*
=*Telaranea pulcherrima* var. *pulcherrima*

Checklist of Australian hornworts and liverworts

Acrobolbus Nees

= *Tylimanthus* Mitt.

= *Marsupidium* Mitt.

Acrobolbus cinerascens (Lehm. & Lindenb.) Bastow

≡ *Jungermannia cinerascens* Lehm. & Lindenb.

Ref.: Söderström et al. 2016 (tax.)

Acrobolbus cinerascens var. **cinerascens**

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: Highway B28, E of Mt Murchison, Quinn Creek, 20 Feb. 1998, *J.E. Braggins 98072A* (HO 553545).

NSW, **Vic.**, **Tas. Macquarie I.**

Acrobolbus concinnus (Mitt.) Grolle

≡ *Gymnanthe concinna* Mitt.

= *Alicularia tenella* Rodway

= *Symphyomitra weymouthii* Pearson

Ref.: Söderström et al. 2016 (tax.); Engel & Glenny 2019b (dist.)

Herbarium voucher: New South Wales: Mount Hyland Circuit Track, southern summit, Mount Hyland Nature Reserve, 13 Apr. 2011, *M.A.M. Renner 5251* (NSW 875798).

NSW, **Vic.**, **Tas.**

Acrobolbus epiphytus (Colenso) Briscoe

= *Plagiochila serrifolia* Steph.

≡ *Marsupidium epiphytum* Colenso

Ref.: Briscoe et al. 2015 (tax.); Renner 2018 (dist.)

Herbarium voucher: New South Wales: Wyong, Aug. 1910, *W.W. Watts 1100* (G 00067820).

Renner (2018) attributed the type of *Plagiochila serrifolia* to *Acrobolbus epiphytus*. No other specimens of this latter species are reported from Australia.

NSW

Acrobolbus knightii (Mitt.) Briscoe

≡ *Marsupidium knightii* Mitt.

Ref.: Söderström et al. 2016 (tax.); Engel & Glenny 2019b (dist.)

Herbarium voucher: New South Wales: Track to Wrights Lookout, New England National Park, 72 km E of Armidale, 5 Apr. 1991, *H. Streimann 47867* (CBG 9107913.1).

Qld, **NSW**, **Tas.**

Acrobolbus ochrophyllus (Hook.f. & Taylor) R.M.Schust.

≡ *Jungermannia ochrophylla* Hook.f. & Taylor

Ref.: Söderström et al. 2016 (tax.); Engel & Glenny 2019b (dist.)

Herbarium voucher: Tasmania: Mt Sprent, 14 Feb. 1987, *J. Jarman* (HO 572850).

Tas., **Macquarie I.**

Acrobolbus pseudosaccatus (Grolle) Briscoe

≡ *Tylimanthus pseudosaccatus* Grolle

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: Five Mile Condominium Creek, 7 Dec. 2007, *D.C. Cargill 1114* (CANB 956283.1).

A single report from the southern highlands of New South Wales (CANB 636780.1) should be confirmed.

Tas.

Acrobolbus setulosus (Mitt.) Briscoe

≡ *Gymnanthe setulosa* Mitt.

Marsupidium setulosum (Mitt.) Mitt.

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: New South Wales: New England National Park, 21 Apr. 1989, *E.A. Brown 89/79 a* (NSW 435356).

NSW, **Vic.**, **Tas.**

Acrobolbus spinifolius R.M.Schust.

Ref.: Engel & Glenny 2019b (tax.); Renner & Braggins 2006 (dist.)

Herbarium voucher: Tasmania: 4 Dec 2007, *J.E. Braggins 07/110* (AK359695).

Tas.

Acrobolbus surculosus (Nees) Trevis.

≡ *Scapania surculosa* Nees

Marsupidium surculosum (Nees) Schiffn.

= *Jungermannia abbreviata* Hook.f. & Taylor

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Queensland: Coomera River catchment, MacPherson Range, O'Reillys, Bithongabel, Lamington National Park, 5 Mar. 2014, *A.E. Orme & M.A.M. Renner 6812* (NSW 850855).

Qld, **NSW**, **ACT**, **Vic.**, **Tas.**

Acrobolbus tenellus (Taylor ex Lehm.) Trevis.

≡ *Gymnanthe tenella* Taylor ex Lehm.

Jungermannia tenella (Taylor ex Lehm.) Hook.f. & Taylor

Tylimanthus tenellus (Taylor ex Lehm.) Mitt.

= *Tylimanthus flaccidus* Berggr.

Ref.: Engel & Glenny 2019b (tax., dist.)

Acrobolbus tenellus var. **diversifolius** (E.A.Hodgs.) Briscoe

≡ *Tylimanthus diversifolius* E.A.Hodgs.

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: King River, Teepookana State Forest, 10 km SE of Strahan, 9 May 1997, *H. Streimann 59557* (CBG 9803235.1).

NSW, **ACT**, **Vic. Tas.**

Acrobolbus tenellus var. **tenellus**

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: Mt Wellington, Thark Ridge, 13 Jan. 1981, *A.V. Ratkowsky H1224* (CBG 8205717.1).

A single report from the Wet Tropics Bioregion of NE Queensland (CANB 607682.1) should be confirmed.

NSW, **ACT**, **Vic. Tas.**

Acrolejeunea (Spruce) Steph., *nom. cons.*

≡ *Lejeunea subg. Acrolejeunea* Spruce

Ref.: Söderström et al. 2015 (tax.)

Genus conserved following the addition of Article 41.4 to the ICN.

Acrolejeunea arcuata (Nees) Grolle & Gradstein

≡ *Jungermannia arcuata* Nees

Ref.: Gradstein 1975 (tax.)

Acrolejeunea arcuata subsp. **gradsteinii** M.A.M.Renner

Herbarium voucher: Queensland: Summit area of Mount Bellenden Ker, S of Cairns, 7 Jul. 2005, *E.A. Brown & M.A.M. Renner 1912* (NSW 871961).

Qld

Acrolejeunea aulacophora (Mont.) Steph.

≡ *Phragmicoma aulacophora* Mont.

Ptychocoleus aulacophorus (Mont.) Trevis.

Ref.: Gradstein 1975 (tax.)

Herbarium voucher: Queensland: Track to Haywoods Gully, Conway National Park, 23 Jun. 2005, *E.A. Brown & M.A.M. Renner 1557* (NSW 866125).

Qld, **NSW**, **Tas.**, **Norfolk I.**

Acrolejeunea pycnoclada (Taylor) Schiffn.

≡ *Ptychanthus pycnocladus* Taylor

Acrolejeunea pycnoclada subsp. **pycnoclada**

Ref.: Gradstein 1975 (tax.); Thiers & Gradstein 1989 (dist.)

Herbarium voucher: Queensland: Cape Tribulation, northern side of Cape Tribulation, Daintree National Park, 11 Jul. 2005, *E.A. Brown & M.A.M. Renner 2072* (NSW 887370).

Qld

Acrolejeunea securifolia (Nees) Steph. & Watts

≡ *Jungermannia securifolia* Nees

= *Lejeunea wildii* Steph.

Ref.: Gradstein 1975 (tax.)

Acrolejeunea securifolia subsp. **securifolia**

= *Ptychocoleus parvus* Steph.

= *Acrolejeunea wildii* Steph. ex Watts

Ptychocoleus wildii (Steph. ex Watts) Steph.

Ref.: Gradstein 1975 (tax.); Thiers & Gradstein 1989 (dist.)

Herbarium voucher: Queensland: Stream to Mount Dryander running NW from Patullo Road, Dryander State Forest, 24 Jun. 2005, *E.A. Brown & M.A.M. Renner 1562a* (NSW 866130).

NT, **Qld**, **NSW**, **Lord Howe I.**, **Norfolk I.**

Acromastigum A.Evans

Ref.: Brown & Renner 2014 (tax.)

Acromastigum bancanum (Sande Lac.) A.Evans

≡ *Mastigobryum bancanum* Sande Lac.

Herbarium voucher: Queensland: Thornton Peak, track to summit on western flank from Hilda Creek, on summit plateau, 13 Aug. 2017, *M.A.M. Renner, A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys 8400* (NSW 1060748).

New record for Australia, known by three recent collections from Thornton Peak and Mt Finnigan.

Qld

Acromastigum carcinum M.A.M.Renner & T.C.Wilson

Ref.: Renner & Wilson 2018 (tax., dist.)

Herbarium voucher: Queensland: Elliot Creek, small tributary on true left c. 200 m downstream from Fruitbat Falls, Jardine River National Park, 8 Aug. 2015, *M.A.M. Renner & T.C. Wilson 7353* (NSW 992696).

Qld

Acromastigum cavifolium R.M.Schust.

Ref.: Brown & Renner 2014 (tax., dist.)

Herbarium voucher: Tasmania: track off road to White Spur Dam, 24 Jan. 1992, *J. Jarman* (HO 310141).

Tas.

Acromastigum colensoanum (Mitt.) A.Evans ex Reimers

≡ *Mastigobryum colensoanum* Mitt.

= *Mastigobryum erosifolium* Steph.

= *Mastigobryum divaricatum var. muellerianum* Gottsche

Ref.: Brown & Renner 2014 (dist.)

Herbarium voucher: New South Wales: MacPherson Range, Tooloona Lookout, Lamington National Park, 6 Mar. 2014, *A.E. Orme and M.A.M. Renner 6820* (NSW 850580).

Qld, **NSW**, **Vic.**, **Tas.**

Acromastigum divaricatum (Nees) A.Evans ex Reimers

≡ *Mastigobryum divaricatum* Nees

= *Jungermannia divaricata* Gottsche, Lindenb. & Nees, *nom. illeg.*

Ref.: Brown & Renner 2014 (tax., dist.)

Herbarium voucher: Tasmania: Tributary of the Serpentine River, N of the Mount Sprent track, c. 1 km directly ESE of Serpentine Dam, Southwest Conservation Area, 16 Jan. 1994, *E.A. Brown & K.L. Radford 94/91* (NSW 285478).

Tas.

Acromastigum echinatiforme (De Not.) A.Evans

≡ *Mastigobryum echinatiforme* De Not.

Ref.: Brown & Renner 2014 (tax.)

Herbarium voucher: Queensland: Devils Thumb track. [NW of Mossman], Daintree National Park, 28 Mar. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 2012/317* (NSW 870845).

Acromastigum echinatiforme was excluded from Australia by Renner & Wilson (2018), as a misapplication to *Acromastigum implexum*, subsequently *A. echinatiforme* has been recognised in Australia based on a single gathering from montane rainforest uphill of the Coral fern patch in the vicinity of Manjil Jamalji, Wet Tropics Bioregion, Queensland, cited above. This Australian gathering was made by Elizabeth Brown in 2012 on her last trip to the Wet Tropics Bioregion, at a time when her then undiagnosed liver cancer was already well advanced. Dr Brown subsequently devoted some time to establishing the identity of this 'small brown one', but this investigation was cut short by her terminal illness without satisfactory resolution. Only after viewing original material of *Acromastigum echinatiforme* in Geneva was the likely identity of this small brown plant resolved.

Qld

Acromastigum exiguum (Steph.) A.Evans

≡ *Mastigobryum exiguum* Steph.

Ref.: Brown & Renner 2014 (tax., dist.)

Herbarium voucher: New South Wales: Bowens Creek, c. 100 m S of bridge, 8 Mar. 2004, *E.A. Brown, M.M. Heslewood & H. Mcpherson 2004/09* (NSW 700366).

NSW, **Vic.**

Acromastigum fumosum E.A.Br. & M.A.M.Renner

Ref.: Brown & Renner 2014 (tax., dist.)

Herbarium voucher: Tasmania: Mt Sprent, 31 Jan. 1987, *J. Jarman* (HO 571178).

Tas.

Acromastigum furcatifolium (Steph.) E.A.Br.

≡ *Lepidozia furcatifolia* Steph.

Ref.: Brown & Renner 2014 (tax., dist.)

Herbarium voucher: New South Wales: Adelina Falls, cliff-face to E of falls, Blue Mountains National Park, 4 May 1998, *E.A. Brown & P.C. Jobson 98/04* (NSW 422368).

NSW

Acromastigum implexum M.A.M.Renner

Ref.: Renner & Wilson 2018 (tax., dist.)

Herbarium voucher: Queensland: Track to Manjal Jimalji, ridge between coral fern patch and Devils Thumb, Daintree National Park, 18 May 2014, *M.A.M. Renner & T.C. Wilson 6969b* (NSW 859384).

Most Australian specimens previously identified as *Acromastigum echinatiforme* are this species.

Qld

Acromastigum interstisiale E.A.Br. & M.A.M.Renner

Ref.: Brown & Renner 2014 (tax., dist.)

Herbarium voucher: Tasmania: 3 km south of Teepookana Bridge, 8 Nov. 1990, *J. Jarman* (HO 525959).

Tas.

Acromastigum mooreanum (Steph.) E.A.Hodgs.

≡ *Bazzania mooreana* Steph.

Ref.: Brown & Renner 2014 (tax., dist.)

Herbarium voucher: Tasmania: Mt Norold, summit, 24 Feb. 1994, *J. Jarman* (HO 571168).

Tas.

Acromastigum prismaticale E.A.Br. & M.A.M.Renner

Ref.: Brown & Renner 2014 (tax., dist.)

Herbarium voucher: Tasmania: Anthony Road, 9 May 1991, *J. Jarman* (HO 562403).

Tas.

Acromastigum stenophyllum R.M.Schust.

Ref.: Brown & Renner 2014 (tax.)

Herbarium voucher: Queensland: Summit ridge west of Centre Peak, Wooroonooran National Park, Bellenden Ker Range, 12 Jun. 2001, *E.A. Brown, A. Cairns, C. Cargill, S. Pocs & T. Pocs* 01091/L-B (BRI AQ0875916).

A single Australian record, from Mt Bartle Frere.

Qld

Acromastigum tenax (Steph.) A.Evans

≡ *Mastigobryum tenax* Steph.

Ref.: Brown & Renner 2014 (tax., dist.)

Herbarium voucher: Queensland: track to Devils Thumb. [NW of Mossman], Daintree National Park, 28 Mar. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 2012/321* (NSW 859322).

Qld

Acromastigum verticale (Steph.) E.A.Hodgs.

≡ *Mastigobryum verticale* Steph.

Ref.: Brown & Renner 2014 (tax., dist.)

Herbarium voucher: Tasmania: Mt Sprent, 31 Jan. 1987, *J. Jarman* (HO 571177).

Tas.

Acroscyphella N.Kitag. & Grolle

= *Austroscyphus* R.M.Schust., *nom. illeg.*

= *Acroscyphus* N.Kitag., *nom. illeg.*

Acroscyphella iwatsukii (N.Kitag.) N.Kitag. & Grolle

≡ *Acroscyphus iwatsukii* N.Kitag.

Ref.: Kitagawa & Grolle 1985 (tax.)

Herbarium voucher: Queensland: Mt Finnigan, forested stream between two broken ridges running NW from summit, Cedar Bay National Park, 7 Jun. 2017, *H. Hancock, T. Houghton, M.A.M. Renner, L. Roberts, A. Rouse & S. Worboys 8151* (NSW 1060632).

Newly recorded for Australia from Thornton Peak, based on collections made in 2017. These agree with the type material in their distinctly lobed leaves, especially on small stature shoots. The relationships between these plants from Thornton Peak and *Acroscyphella* from further south in the Wet Tropics Bioregion, from Manjil Jimalji southward, may warrant further scrutiny, as southern plants rarely, if ever bear leaves with pronounced lobes, even when small.

Qld

Acroscyphella phoenicorhiza (Grolle) N.Kitag. & Grolle

≡ *Neesioscyphus phoenicorhizus* Grolle

Ref.: Kitagawa & Grolle 1985 (tax.); Engel & Glenny 2019a (dist.)

Herbarium voucher: Tasmania: Mount Dundas, summit ridge, Mount Dundas Regional Reserve, 27 Jan. 2012, *E.A. Brown & M.A.M. Renner 6015* (NSW 970371).

Records of this species for Queensland by Grolle (1986) are based, in part, on *Acroscyphella iwatsukii*. Reference to the existence of a third undescribed species in Queensland by Renner, pers. comm. in Engel and Glenny (2018) requires confirmation on the basis of molecular data. Possibly there are two species in the Wet Tropics, as noted above.

Tas.

Adelanthus Mitt., *nom. cons.*

= *Calyptrocolea* R.M.Schust.

Adelanthus falcatus (Hook.) Mitt.

≡ *Jungermannia falcata* Hook.

Plagiochila falcata (Hook.) Gottsche, Lindenb. & Nees

Calyptrocolea falcata (Hook.) R.M.Schust.

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Pine Valley, Cephissus Falls, NNW of Lake St Clair, 10 Feb. 1977, *J.J. Engel 14259* (HO 530580).

Qld, **NSW**, **Vic.**, **Tas.**

Adelanthus gemmiparus (R.M.Schust.) E.A.Hodgs.

≡ *Calyptrocolea gemmipara* R.M.Schust.

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Lake Fenton, north side, 27 Nov. 1973, *D.H. Norris 28517* (HO 530633).

Tas.

Adelanthus occlusus (Hook.f. & Taylor) Carrington

≡ *Jungermannia occlusa* Hook.f. & Taylor

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Ridge SE of Black Bluff near junction of access road to plateau area and road to Devonport gold mines, S-facing slope, S of Burnie, 31 Mar. 1977, *J.J. Engel 16257* (HO 530678).

Tas.

Allisoniella E.A.Hodgs.

Allisoniella nigra (Rodway) R.M.Schust.

≡ *Sphenolobus niger* Rodway

Cephaloziella nigra (Rodway) Grolle

Allisoniella nigra subsp. **nigra**

Herbarium voucher: Tasmania: Dip River at Dip Falls, 21 Mar. 2019, *J. Jarman* (HO 597155).

Vic., **Tas.**

Allisoniella tasmanica R.M.Schust.

Ref.: Schuster 1971 (tax., dist.)

Herbarium voucher: *RMS 60285* (F)

Tas.

Allorgella Tixier

Ref.: Bechteler et al. 2016 (tax.)

Allorgella australiensis (B.M.Thiers) Bechteler, G.E.Lee, Schäf.-Verw. & Heinrichs

≡ *Otolejeunea australiensis* B.M.Thiers

Ref.: Bechteler et al. 2016 (tax.)

Herbarium voucher: Queensland: Track to Cloudy Creek, Paluma Range National Park, 26 Jun. 2005, *E.A. Brown & M.A.M. Renner 1588* (NSW 1004993).

Qld

Allorgella semperiana (Gottsche ex Steph.) Bechteler, G.E.Lee, Schäf.-Verw. & Heinrichs

≡ *Prionolejeunea semperiana* Gottsche ex Steph.

Otolejeunea semperiana (Gottsche ex Steph.) Grolle

Ref.: Bechteler et al. 2016 (tax.)

Herbarium voucher: Queensland: `H Track', Paluma, Paluma Range, Mt Spec State Forest, 40 km S of Ingham, 28 Oct. 1995, *H. Streimann 57955* (CBG 9607460.1).

Qld

Anastrophyllopsis (R.M.Schust.) Váňa & L.Söderstr.

≡ *Anastrophyllum sect. Anastrophyllopsis* R.M.Schust.

Ref.: Váňa et al. 2013c (tax.)

Anastrophyllopsis revoluta (Steph.) Váňa & L.Söderstr.

≡ *Anastrophyllum revolutum* Steph.

Ref.: Váňa et al. 2013c (tax.)

Herbarium voucher: Queensland: Mount Bellenden Ker, summit with communications tower, water supply stream at end of track to NE of communications precinct, Bellenden Ker National Park, 8 Jul. 2005, *E.A. Brown & M.A.M. Renner* 1972 (NSW 1005672).

New record for Australia, based on recent collections from the Wet Tropics Bioregion.

Qld

Anastrophyllopsis subcomplicata (Lehm. & Lindenb.) Váňa & L.Söderstr.

≡ *Jungermannia subcomplicata* Lehm. & Lindenb.

= *Jungermannia schismoides* Mont.

Anastrophyllum schismoides (Mont.) Steph.

= *Anastrophyllum schismoides var. crassulum* J.J.Engel

Ref.: Váňa et al. 2013c (tax.); Engel & Braggins 1998 (dist.)

Herbarium voucher: Tasmania: West Coast Range, Proprietary Peak, just N of Mount Jukes, 8 Apr. 1983, *J.J. Engel 20045* (NSW 524020).

Vic., Tas.

Anastrophyllum (Spruce) Steph.

≡ *Jungermannia subg. Anastrophyllum* Spruce

Ref.: Váňa et al. 2013c (tax.)

Anastrophyllum piligerum (Nees) Steph.

≡ *Jungermannia piligera* Nees

Ref.: Söderström et al. 2016 (tax.)

Herbarium voucher: Queensland: South Peak, Mt Bartle Frere, 30 Sep. 1982, *M.L. Hicks 11246* (BRI AQ0536175).

Qld

Andrewsianthus R.M.Schust.

Andrewsianthus bidens (Mitt. ex Steph.) R.M.Schust.

≡ *Lophozia bidens* Mitt. ex Steph.

Ref.: Söderström et al. 2016 (tax.)

Herbarium voucher: Queensland: (MELU 3204).

Qld

Andrewsianthus marionensis (S.W.Arnell) Grolle

≡ *Lophozia marionensis* S.W.Arnell

= *Cephalolobus squarrosus* R.M.Schust.

Andrewsianthus cuspidatus R.M.Schust., *nom. illeg.*

Herbarium voucher: Tasmania: Mt Sprent, 14 Feb. 1987, *J. Jarman* (HO 573531).

Vic., Tas., Macquarie I.

Andrewsianthus perigonialis (Hook.f. & Taylor) R.M.Schust.

≡ *Jungermannia perigonialis* Hook.f. & Taylor

= *Jungermannia stygia* Hook.f. & Taylor

= *Sphenolobus perigonialis f. submersus* Rodway

Ref.: Söderström et al. 2016 (tax.)

Herbarium voucher: Tasmania: Naturalist Peak, Mt Field National Park, 18 Jan. 1981, *D.A. Ratkowsky* (HO 130831).

The single record for NSW was gathered by Watts in the Blue Mountains.

NSW, Tas., Macquarie I.

Andrewsianthus puniceus (Nees) R.M.Schust. ex Grolle

≡ *Jungermannia punicea* Nees

Ref.: Söderström et al. 2016 (tax.)

Herbarium voucher: Queensland: Mt Bellenden Ker, South Peak, 23 km SSE of Gordonvale, 3 Mar. 1983, *H. Streimann 27460* (CBG 8305425.1).

Qld

Aneura Dumort.

Aneura eachamensis Hewson

Ref.: Hewson 1970a (tax.)

Herbarium voucher: Queensland: Vision Falls, Lake Eacham, 20 Aug. 1964, *H.J. Hewson H6468396* (BRI AQ0722030).

Qld

Aneura rodwayi Hewson

Ref.: Hewson 1970a (tax., dist.)

Herbarium voucher: Tasmania: Road to Hartz Mountain; just outside boundary of National Park, Hartz Mountain National Park, 11 Dec. 1990, *E.A. Brown 90/114a* (NSW 277068).

Also reported from LHI, NSW, Vic, reports that likely over-extend the species' distribution.

Tas.

Anthoceros L.

Anthoceros apocynon Cargill & Palsson

Ref.: Cargill & Palsson 2021 (tax.)

Herbarium voucher: New South Wales: Pilliga State Conservation Area, Dog Proof Fence Road, in tributary of Goona Creek, 13 Sep. 2020, *R.L. Palsson 398*(3) (CANB 923469.1).

NSW

Anthoceros capricornii Cargill & G.A.M.Scott

Ref.: Cargill & Scott 1997 (tax., dist.)

Herbarium voucher: Northern Territory: Upper Ferguson River, 6 Feb. 1989, *J.Russell-Smith 7173* (CBG 8914335.1).

WA, **NT**

Anthoceros fragilis Steph.

= *Anthoceros fertilis* Steph.

Herbarium voucher: Queensland: Site 1. Near a drainage line on the southern side of Mt Stuart road, c. 1.9 km SE along the Mt Stuart road from the car park at the top of Mt Stuart, 12 May 2010, *R.Lovatt TH9821B* (CANB 906865.2).

NT, **Qld**

Anthoceros palssoniae Cargill

Ref.: Cargill & Palsson 2021 (tax., dist.)

Herbarium voucher: New South Wales: Pilliga State Conservation Area, Dog Proof Fence Road, in tributary of Goona Creek, 13 Sep. 2020, *R.L. Palsson 398*(1) (CANB 923467.1).

NSW

Anthoceros punctatus L.

= *Anthoceros ferdinandi-muelleri* Steph.

Herbarium voucher: Western Australia: Walpole, behind and east of Walpole Visitors' Centre down to a creek, 27 July 2022, *D.C. Cargill 1724* (CANB 956899.1).

WA, Qld, **NSW**, **ACT**, **Vic, Tas.**

Anthoceros wellmanii Cargill

Ref.: Cargill & Palsson 2021 (tax., dist.)

Herbarium voucher: New South Wales: 17 km NW Coonabarabran on Baradine Road, possibly in Yearinan State Forest, between road and railway line, 21 Sep. 2010, *P. Wellman 587A.3* (CANB 923460.1).

NSW

Apopellia (Grolle) Nebel & D.Quandt

Apopellia endiviifolia (Dicks.) Nebel & D.Quandt

Herbarium voucher: New South Wales: Royal Botanic Gardens, Sydney, 15 May 2024, *M.A.M. Renner 9890* (NSW)

Apopellia endiviifolia is reported as a new adventive for Australia based on a population naturalised within the fernery of the Royal Botanic Gardens, Sydney, currently its only known Australian occurrence.

NSW

Archeophylla R.M.Schust.

Ref.: Engel & Glenny 2008 (tax.)

Archeophylla schusteri (E.A.Hodgs. & Allison) R.M.Schust.

≡ *Temnoma schusteri* E.A.Hodgs. & Allison

Ref.: Engel & Glenny 2008 (tax.)

Herbarium voucher: Tasmania: Scotts Peak Road, 5 Nov. 2017, *J. Jarman* (HO 591104).

Tas.

Asterella P.Beauv., *nom. cons.*

Asterella australis (Hook.f. & Taylor) Verd. ex G.A.M.Scott & J.A.Bradshaw

≡ *Fimbraria australis* Hook.f. & Taylor

Herbarium voucher: Queensland: Eungella National Park, Finch Hatton Gorge, Rawson's Creek, 22 Jul. 2014, *D.C. Cargill 956QLD* (CANB 900937.1).

Qld, **Tas.**

Asterella conocephala (Steph.) R.M.Schust.

≡ *Fimbraria conocephala* Steph.

Herbarium voucher: Western Australia: The Humps, Hyden, 8 Aug. 1972, *N. Sammy* (PERTH 7530897).

WA, **Qld**, **NSW**, **Vic.**, **Tas.**

Asterella dioica (Steph.) H.A.Mill.

≡ *Fimbraria dioica* Steph.

Herbarium voucher: Queensland: Eungella, roadside bank on side of bitumen road below Eungella General Store, 2 Jul. 2014, *D.C. Cargill 964QLD* (CANB 900945.1).

NSW

Asterella drummondii (Taylor) R.M.Schust. ex D.G.Long

≡ *Fimbraria drummondii* Taylor

Herbarium voucher: New South Wales: Bendick Murrell National Park, north of Young, along Annandale Trail, *R.W. Purdie 12056* (CANB 918524.3).

WA, **SA**, **Qld**, **NSW**, **ACT**, **Vic.**, **Tas.**, **Lord Howe I.**

Asterella longebarbata (Steph.) H.A.Mill.

≡ *Fimbraria longebarbata* Steph.

The status of this species requires further investigation.

Qld

Asterella muelleri (Gottsche ex Steph.) R.M.Schust.

≡ *Fimbraria muelleri* Gottsche ex Steph.

The status of this species requires further investigation.

NSW

Asterella setisquama (Steph.) R.M.Schust.

≡ *Fimbraria setisquama* Steph.

Herbarium voucher: South Australia: Barossa Range, Apr. 1848, *F. Mueller* (MEL 1038973A).

SA, **NSW**, **Vic.**

Asterella subplana (Steph.) R.M.Schust.

≡ *Fimbraria subplana* Steph.

Herbarium voucher: New South Wales: Off Pittwater Rd, Gladesville, Aug. 1912, *W.W. Watts 1099* (NSW 478378).

SA, **NSW**

Asterella tasmanica (Steph.) R.M.Schust.

≡ *Fimbraria tasmanica* Steph.

Herbarium voucher: New South Wales: Near Lodge, Newington Asylum, Parramatta River, Jul. 1910, *W.W. Watts 994* (NSW 433467).

NSW, Tas.

Asterella tenera (Mitt.) R.M.Schust.

≡ *Fimbraria tenera* Mitt.

Herbarium voucher: Victoria: Bat's Ridge Wildlife Reserve, Portland, 5 Sep. 1951, *A.C. Beauglehole 2039* (MEL 1037420A).

Vic.

Asterella tenerrima (Steph.) H.A.Mill.

≡ *Fimbraria tenerrima* Steph.

The status of this species requires further investigation.

NSW

Asterella whiteleggeana (Steph.) R.M.Schust.

≡ *Fimbraria whiteleggeana* Steph.

= *Fimbraria caucasica* Steph.

Asterella caucasica (Steph.) H.Buch, A.Evans & Verdoorn

Herbarium voucher: New South Wales: Burns Bay & Tambourine Bay Roads, [Lane Cove], Aug. 1891, *T.W. Whitelegge* (NSW 478429).

Qld, NSW, Vic?

Austroriella Cargill & Milne

Austroriella salta Milne & Cargill

Herbarium voucher: Western Australia: Salt lake c. 2 km S from Grigson Lookout, between Green Head and Jurien Bay, just N of Coastal Road, 29 Aug. 2009, *H.M. Jolley 175* (CANB 786841.1).

WA

Balantiopsis Mitt.

Balantiopsis brotheri Steph.

Herbarium voucher: Queensland: Thornton Peak, track to summit on western flank from Hilda Creek, stream in the broad gully draining the summit plateau, Daintree National Park, 14 Aug. 2017, *M.A.M. Renner, A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys 8504* (NSW 1060953).

Plants from the Wet Tropics Bioregion determined as *Balantiopsis diplophylla* differ from *B. diplophylla* by their evenly and densely dentate-ciliate dorsal lobe, and their under-leaves being consistently divided to half way. *Balantiopsis brotheri*, based on a type from the Wet Tropics, was synonymised with *B. diplophylla* by Engel (1968), we reinstate it here.

Qld

Balantiopsis convexiuscula Berggr.

= *Balantiopsis aequiloba* Berggr.

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: On bank of railway track (Abt. section), King River, 7 Jan. 1914, *W.A. Weymouth* (MEL 0300151A).

Australian records should be critically compared with New Zealand material, and with *Balantiopsis tumida*.

NSW, Vic., Tas.

Balantiopsis diplophylla (Hook.f. & Taylor) Mitt.

≡ *Jungermannia diplophylla* Hook.f. & Taylor

= *Balantiopsis wattsiana* Steph.

= *Balantiopsis diplophylla* f. *paucidentata* Rodway

= *Balantiopsis pusilla* Steph.

= *Isotachis pusilla* Steph.

= *Balantiopsis diplophylla* var. *kirtonii* Steph.

= *Balantiopsis kingwella* Steph.

= *Balantiopsis subkingwella* Steph.

= *Balantiopsis decurrens* Steph.

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: Savage River Pipeline Road, just S of Rapid River, 31 Jan. 2015, *L.H. Cave 2496* (HO 578941).

Plants from the Wet Tropics of Queensland differ in leaf and under-leaf shape, division, and dentition, and are referred to *Balantiopsis brotheri*.

Qld, NSW, Vic., Tas., Lord Howe I.

Balantiopsis tumida Berggr.

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: Great Western Tiers, vicinity of Devils Gullet Lookout, above Fisher River and W of Lake Mackenzie, 24 Mar. 1977, *J.J. Engel 15888* (CANB 769750.1).

NSW, Vic., Tas.

Bazzania Gray, *nom. cons.*

Nom. cons. against *Bazzanius*

Bazzania accreta (Lehm. & Lindenb.) Trevis.

≡ *Mastigobryum accretum* Lehm. & Lindenb.

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Victoria: Coast Range Road, 18 km SSE of Bendoc, 10 Apr. 1986, *H. Streimann 36685* (CANB 566382.1).

Vic., Tas.

Bazzania adnexa (Lehm. & Lindenb.) Trevis.

≡ *Jungermannia adnexa* Lehm. & Lindenb.

= *Jungermannia novae-hollandiae* Nees ex Hook.f. & Taylor

Mastigobryum novae-hollandiae (Nees ex Hook.f. & Taylor) Nees

Bazzania novae-hollandiae (Nees ex Hook.f. & Taylor) Carrington & Pearson

Ref.: Meagher 2019 (tax., dist.)

Bazzania adnexa var. **adnexa**

= *Mastigobryum dentistipulum* Steph.

= *Mastigobryum baileyanum* Steph.

Bazzania baileyana (Steph.) Steph. ex Rodway

= *Mastigobryum sieberianum* Lindenb.

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: New South Wales: Cataract Falls, Lawson, 29 Mar. 1989, *E.A. Brown, R.G. Coveny & P.D. Hind 13022a* (NSW 299627).

Autonym established by publication of *Bazzania adnexa* var. *aucklandica*.

Qld, NSW, ACT, Tas., Lord Howe I.

Bazzania amblyphylla Meagher

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Thornton Peak, track to summit on western flank from Hilda Creek, Daintree National Park, 12 Aug. 2017, *M.A.M. Renner, A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys 8357* (NSW 1060681).

Qld

Bazzania avia Meagher

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Tasmania: Coffin Bay, Port Davey, 5 Jan. 1987, *A. Moscal 13782A* (HO 522744).

Tas.

Bazzania bilobata N.Kitag.

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Thornton Peak, track to summit on western flank from Hilda Creek, stream in the broad gully draining the summit plateau, Daintree National Park, 14 Aug. 2017,

M.A.M. Renner, A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys 8514 (NSW 1060997).

Qld

Bazzania caudistipula (Steph.) Inoue & H.A.Mill.

≡ *Mastigobryum caudistipulum* Steph.

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Culpha Creek Catchment, Cardwell Range, 41 km SE of Ravenshoe, 23 Jun. 1984, *H. Streimann 29010* (CBG 8407138.1).

Qld

Bazzania citharodes Meagher

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Thornton Peak, track to summit on western flank from Hilda Creek, on summit plateau, Daintree National Park, 14 Aug. 2017, *M.A.M. Renner, A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys 8420* (NSW 1060769).

Qld

Bazzania corbierei (Steph.) Meagher

≡ *Mastigobryum corbierei* Steph.

= *Mastigobryum gracillimum* Steph.

= *Pleuroschisma crenata* Trevis.

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Mt Finnigan, on and flanks of the summit, Cedar Bay National Park, 8 Jun. 2017, *M.A.M. Renner, H. Hancock, T. Houghton, L. Roberts, A. Rouse & S. Worboys 8123* (NSW1060609).

Qld, **NSW**

Bazzania densa (Sande Lac.) Schiffn.

≡ *Mastigobryum densum* Sande Lac.

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Summit area of Mount Bellenden Ker, S of Cairns, 7 Jul. 2005, *E.A. Brown & M.A.M. Renner 1902* (NSW 1005354).

Qld

Bazzania erosa (Reinw., Blume & Nees) Trevis.

≡ *Jungermannia erosa* Reinw., Blume & Nees

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Culpha Creek Catchment, Cardwell Range, 41 km SE of Ravenshoe, 23 Jun. 1984, *H. Streimann 29019* (CBG 8407147.1).

Qld

Bazzania fallax (Sande Lac.) Schiffn.

≡ *Mastigobryum fallax* Sande Lac.

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Culpha Creek Catchment, Cardwell Range, 41 km SE of Ravenshoe, 23 Jun. 1984, *H. Streimann* 29008 (CBG 8407136.1).

Qld

Bazzania fasciculata (Steph.) Meagher

≡ *Mastigobryum fasciculatum* Steph.

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: New South Wales: Megalong Valley, Coachwood Glen, 13 Mar. 1989, *E.A. Brown* 89/32 (NSW 436488).

NSW

Bazzania filiformis Steph.

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Thornton Peak, track to summit on western flank from Hilda Creek, Daintree National Park, 12 Aug. 2017, *M.A.M. Renner , A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys 8361* (NSW 1060685).

Qld

Bazzania franciana (Steph.) N.Kitag.

≡ *Mastigobryum francianum* Steph.

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Rex Creek, Mossman Gorge, 6 km W of Mossman, Daintree River National Park, 5 Dec. 1990, *J.A. Curnow 3778* (NSW451389).

Qld, **NSW**

Bazzania fuhreri Meagher

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: New South Wales: Somersby Falls track from top to lower falls; near base of lower falls beside Flood Creek, Brisbane Waters National Park, 29 May 2003, *A.W. Archer, E.A. Brown & W.S. Cuddy 2003/10* (NSW 605699).

Type locality given as Queensland in error, Darkwood is near Bellingen in New South Wales.

Qld, **NSW**

Bazzania gamscottii Meagher

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Thornton Peak, track to summit on western flank from Hilda Creek, on summit plateau, Daintree National Park, 14 Aug. 2017, *M.A.M. Renner, A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys 8430* (NSW 1060781).

Qld

Bazzania gedeana (Steph.) Meijer

≡ *Mastigobryum gedeanum* Steph.

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Cardwell Range, 24 km WNW of Cardwell, 20 Jun. 1984, *H. Streimann 28627* (CBG 8406634.1).

Qld

Bazzania hochstetteri (Reichardt) E.A.Hodgs.

≡ *Mastigobryum hochstetteri* Reichardt

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Tasmania: Huon River, 1.25 km SSE of Scotts Peak Dam, 17 Feb. 1996, *A. Moscal 28147A* (HO 522729).

NSW, **Vic.**, **Tas.**

Bazzania intermedia (Gottsche & Lindenb.) Trevis.

≡ *Mastigobryum intermedium* Gottsche & Lindenb.

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Hilda Creek, at intersection with track to summit of Thornton Peak, in vicinity of camp at the bottom of the climb, Daintree National Park, 18 Aug. 2017, *M.A.M. Renner, A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys* 8631 (NSW 1061158).

Qld

Bazzania involuta (Mont.) Trevis.

≡ *Herpetium involutum* Mont.

= *Mastigobryum elegans* Colenso

Ref.: Meagher 2019 (tax., dist.)

Bazzania involuta var. **involuta**

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Tasmania: First of May Plains, 29 Mar. 2001, *A. Moscal 31218B* (HO 522699).

Autonym established by publication of *Bazzania involuta* var. *submutica*.

Tas.

Bazzania javanica (Sande Lac.) Schiffn.

≡ *Mastigobryum javanicum* Sande Lac.

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Mt Bellenden Ker, South Peak, 23 km SSE of Gordonvale, 3 Mar. 1983, *H. Streimann 27469* (CBG 8305434.1).

Qld

Bazzania loricata (Reinw., Blume & Nees) Trevis.

≡ *Jungermannia loricata* Reinw., Blume & Nees

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Main Coast Range, 19 km NNW of Mount Molloy, 30 Jun. 1984, *H. Streimann 30288* (CBG 8408643.1).

Qld

Bazzania mittenii (Steph.) Steph.

≡ *Mastigobryum mittenii* Steph.

= *Bazzania nova* J.J.Engel & G.L.Merr.

Mastigobryum affine Mitt., *nom. illeg.*

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Old Mill Road, 40 km WSW of Ingham, 19 Jun. 1984, *H. Streimann 28314* (CANB 566344.1).

Qld

Bazzania monilinervis (Lehm. & Lindenb.) Trevis.

≡ *Jungermannia monilinervis* Lehm. & Lindenb.

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Victoria: Track to Cyathea Falls, off Tarra Valley Road, Tarra-Bulga National Park, 7 Oct. 2003, *E.A. Brown 2003/104* (NSW490469).

NSW, **Tas.**, **Vic.**

Bazzania nitida (F.Weber) Grolle

≡ *Jungermannia nitida* F.Weber

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Mt Finnigan, Mt Finnigan Range, Cedar Bay National Park, 39 km S of Cooktown, 20 Oct. 1995, *H. Streimann 57220* (CBG 9606105.1).

Qld

Bazzania novae-zelandiae (Mitt.) Besch. & C.Massal.

≡ *Mastigobryum novae-zelandiae* Mitt.

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Tasmania: First of May Plains, 29 Mar. 2001, *A. Moscal 31203* (HO 522700).

Tas.

Bazzania parisii (Steph.) N.Kitag.

≡ *Mastigobryum parisii* Steph.

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Track to Mt Finnigan, Mt Finnigan Range, Cedar Bay National Park, 39 km S of Cooktown, 20 Oct. 1995, *H. Streimann 57160* (CBG 9519303.1).

Qld

Bazzania sauropoda Meagher

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Thornton Peak, track to summit on western flank from Hilda Creek, stream in the broad gully draining the summit plateau, Daintree National Park, 14 Aug. 2017, *M.A.M. Renner, A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys 8541* (NSW 1061020).

Qld

Bazzania subtilis (Sande Lac.) Trevis.

≡ *Mastigobryum subtile* Sande Lac.

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Track to Mt Finnigan, Mt Finnigan Range, Cedar Bay National Park, 39 km S of Cooktown, 20 Oct. 1995, *H. Streimann 57150* (CBG 9519293.1).

Qld

Bazzania tessellata Meagher

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Track to Mt Finnigan, Mt Finnigan Range, Cedar Bay National Park, 39 km S of Cooktown, 20 Oct. 1995, *H. Streimann 57148* (CBG 9519291.1).

Qld

Bazzania uncigera (Reinw., Blume & Nees) Trevis.

≡ *Jungermannia uncigera* Reinw., Blume & Nees

Mastigobryum uncigerum (Reinw., Blume & Nees) Nees

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Thornton Peak, track to summit on western flank from Hilda Creek, on and in the immediate vicinity of the summit outcrop, Daintree National Park, 14 Aug. 2017, *M.A.M. Renner, A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys 8495* (NSW 1060929).

Qld

Bazzania vittata (Gottsche) Trevis.

≡ *Mastigobryum vittatum* Gottsche

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: New South Wales: Boarding House Dam, off Watagan Forest Road, Watagan Range, 1 Oct. 1989, *E.A. Brown 89/193b* (NSW 437186).

Qld, **NSW**

Bazzania wattsiana (Steph.) Meagher

≡ *Mastigobryum wattsianum* Steph.

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: New South Wales: Jerusalem Creek Falls, Chichester State Forest, 19 km NNE of Dungog, 27 Aug. 1987, *H. Streimann 38249* (CANB 566330.1).

Qld, **NSW**

Bazzania wooroonooran Meagher

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Mt Finnigan, on and flanks of the summit, Cedar Bay National Park, 8 Jun. 2017, *M.A.M. Renner, H. Hancock, T. Houghton, L. Roberts, A. Rouse & S. Worboys 8007* (NSW 1060492).

Qld

Bazzania zonulata Meagher

Ref.: Meagher 2019 (tax., dist.)

Herbarium voucher: Queensland: Black Mountain Road, 16 km NW of Kuranda, 7 Jul. 1984, *H. Streimann 31160* (CANB 566342.1).

Qld

Blepharidophyllum Angstr.

Ref.: Crandall-Stotler et al. 2009b (tax.)

Blepharidophyllum vertebrale (Gottsche) Angstr. ex C.Massal.

≡ *Scapania vertebralis* Gottsche

Ref.: Söderström et al. 2016 (tax.)

Herbarium voucher: Tasmania: Mt Sprent, 17 Feb. 1987, *J. Jarman* (HO 570710).

Tas

Brevianthus J.J.Engel & R.M.Schust.

Ref.: Patzak et al. 2016a (tax.)

Engel and Glenny (2018a: 533) stated that the possibility that Brevianthaceae should be a monotypic family in suborder Brevianthinae could not be determined, and that this conclusion was also reached by Patzak et al. (2016). This interpretation misrepresents Patzak et al. (2016), whose results and discussion corroborated previous studies demonstrating the sister relationship between *Tetracymbaliella* and *Brevianthus*, and therefore confirmed the membership of both genera within the Brevianthaceae, which, if accepted, was the third of three families within the suborder Lophocoleinae. Whether or not Brevianthaceae should be recognised as distinct from Lophocoleaceae at all was the moot point in Patzak et al. (2016), not whether *Tetracymbaliella* and *Brevianthus* should be recognised in distinct families in an order separate from the Lophocoleinae. This checklist follows Söderström et al. (2013) in accepting Brevianthaceae as a distinct family within the Lophocoleinae.

Brevianthus flavus (Grolle) J.J.Engel & R.M.Schust.

≡ *Jackiella flava* Grolle

Ref.: Engel 2011 (tax.)

Brevianthus flavus subsp. **flavus**

Ref.: Engel 2011 (tax.); Engel & Glenny 2019a (dist.)

Herbarium voucher: Tasmania: Arthur Range, Mount Hesperus, S of track to summit at the top of the hill, Southwest Conservation Area, 24 Jan. 2012, *M.A.M. Renner* 5958 (NSW880771).

Tas.

Calypogeia Raddi, *nom. cons.*

Ref.: Söderström et al. 2016 (tax.)

Calypogeia arguta Nees & Mont.

Herbarium voucher: Queensland: road to Paluma Dam and Mount Spec, Paluma Range National Park, 7 May 2014, *M.A.M. Renner & T.C. Wilson 6872* (NSW 859407).

This species is here reported new for Australia based on tropical Australian specimens determined by Riclef Grolle, and other specimens collected recently in Queensland.

NT, Qld

Calypogeia sphagnicola (Arnell & J.Perss.) Warnst. & Loeske

≡ *Kantius sphagnicola* Arnell & J.Perss.

= *Calypogeia tasmanica* Rodway

Ref.: Engel & Glenny 2008 (tax., dist.)

Tas.

Castanoclobos J.J.Engel & Glenny

Ref.: Engel & Glenny 2008 (tax.)

Castanoclobos julaceus (Hatcher ex J.J.Engel) J.J.Engel & Glenny

≡ *Leiomitra julacea* Hatcher ex J.J.Engel

Ref.: Engel & Glenny 2008 (tax.)

Herbarium voucher: Tasmania: King River, Teepookana State Forest, 10km SE of Strahan, 9 May 1997, *H. Streimann 59550* (CBG 9803228.1).

Tas.

Caudalejeunea Steph. ex Schiffn.

Ref.: Söderström et al. 2015 (tax.)

Caudalejeunea cristiloba (Steph.) Gradst.

≡ *Acrolejeunea cristiloba* Steph.

Ptychocoleus cristilobus (Steph.) Steph.

Ref.: Thiers & Gradstein 1989 (tax., dist.)

Herbarium voucher: Queensland: Russell River National Park, Cairns, 13 Sep. 1985, *G.A.M. Scott* (MELU H108838a).

Qld

Caudalejeunea lessonii Steph.

Ref.: Thiers & Gradstein 1989 (tax., dist.)

Herbarium voucher: Queensland: East Coast, E of Bellenden Ker Range, mangroves adjacent to Russell River Landing, National Park along Russell River estuary, 11 Jun. 2001, *E.A. Brown, A. Cairns, D.C. Cargill, S. Pócs & T. Pócs 01090/AB* (NSW974535).

Accepted by Sass-Gyarmarti, who determined Australian specimens as this species in 2001.

Qld

Caudalejeunea recurvistipula (Gottsche) Schiffn.

≡ *Lejeunea recurvistipula* Gottsche

= *Caudalejeunea reniloba* (Gottsche) Steph.

Ref.: Söderström et al. 2015 (tax.)

Herbarium voucher: Queensland: Atherton Shire, Danbulla State Forest, 7 July 1976, *D.G. Catcheside 76.69* (AD 36218).

Qld

Cephalomitrion R.M.Schust.

Ref.: Crandall-Stotler et al. 2009b (tax.)

Cephalomitrion aterrimum (Steph.) R.M.Schust.

≡ *Cephalozia aterrima* Steph.

= *Herzogobryum filarium* Grolle

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Cynthia Bay, Lake St Clair National Park, 10 Mar. 1979, *A.V. Ratkowsky H1010* (HO 49673).

NSW, Vic., Tas.

Cephalozia (Dumort.) Dumort.

≡ *Jungermannia sect. Cephalozia* Dumort.

= *Metahygrobiella* R.M.Schust.

Cephalozia macgregorii (Steph.) Váňa

≡ *Hygrobiella macgregorii* Steph.

Metahygrobiella macgregori (Steph.) R.M.Schust.

Ref.: Váňa et al. 2013e (tax.)

Herbarium voucher: Queensland: Mt Finnigan, forested stream between two broken ridges running NW from summit, Cedar Bay National Park, 7 Jun. 2017, *M.A.M. Renner, H. Hancock, T. Houghton, L. Roberts, A. Rouse & S. Worboys 8045* (NSW 1060556).

New record for Australia based on collections from Mt Finnigan made in 2017.

Qld

Cephaloziella (Spruce) Schiffn., *nom. cons.*

Ref.: Engel & Glenny 2008 (tax.)

Cephaloziella arenaria (Steph.) R.M.Schust.

≡ *Cephalozia arenaria* Steph.

Ref.: Schuster 1963 (tax.)

Herbarium voucher: New South Wales: Wardell ferry, Richmond River, 25 Jun. 1902, *W.W. Watts Hepat 480* (NSW 763625).

NSW

Cephaloziella exiliflora (Taylor) Douin

≡ *Jungermannia exiliflora* Taylor

= *Jungermannia bastovii* Carrington & Pearson

Ref.: Engel & Glenny 2008 (tax.)

Herbarium voucher: Victoria: Near Wonderland car park, Grampians National Park, 2 Jul. 1998, *E.A. Brown, D. Cameron & A.J. Downing 98/11* (NSW 421352).

WA, **NT**, **SA**, **Qld**, **Vic.**, **Tas.**

Cephaloziella hirta (Steph.) R.M.Schust.

≡ *Cephalozia hirta* Steph.

Herbarium voucher: New South Wales: Gloucester Falls track, SW of Gloucester in the, Barrington Tops National Park, 16 Jul. 1989, *E.A. Brown & R.G. Coveny 13343* (NSW 469023).

WA, **Qld**, **NSW**, **ACT**, **Vic.**, **Tas.**

Cephaloziella levieri (Steph.) Schiffn. ex Douin

Herbarium voucher: Tasmania: Mt Wellington, Deep Creek Track (=Long Creek), *W.A. Weymouth 316* p.p. (HO 85757).

Tas.

Cephaloziella muelleriana R.M.Schust.

Ref.: Glenny 2008 (dist.)

Herbarium voucher: Tasmania: Manuka Road in the Warra Long-Term Ecological Research Site in southern Tasmania, 7 Nov. 2006, *J. Jarman* (HO 546907).

Tas.

Cephaloziella pulcherrima R.M.Schust.

Ref.: Engel & Glenny 2008 (tax., dist.)

Cephaloziella pulcherrima subsp. **sphagnicola** R.M.Schust.

Ref.: Engel & Glenny 2008 (tax., dist.)

Tas.

Cephaloziella squarrosula Steph.

= *Cephalozia levieri* Steph.

= *Cephalozia squarrosula* Trevis.

Jungermannia squarrosula Taylor, *nom. illeg.*

= *Jungermannia squarrosula* Taylor, *nom. illeg.*

The status of this name requires further investigation.

WA

Cephaloziella varians (Gottsche) Steph.

≡ *Jungermannia varians* Gottsche

Ref.: Engel & Glenny 2008 (tax., dist.)

Cephaloziella varians var. **subantarctica** (R.M.Schust.) R.M.Schust. ex J.J.Engel

Ref.: Engel & Glenny 2008 (tax.)

Herbarium voucher: New South Wales: Near Bathurst, Wambool Nature Reserve, 10 May 1991, *S. Cardale M9* (NSW 295994)

Engel and Glenny (2008) present this taxon as a subspecies in error. No combination for this taxon at subspecies rank within *Cephaloziella varians* has been made, so we accept the taxon at varietal rank, and attribute the Macquarie Island records of *Cephaloziella varians* to it.

SA, **Vic.**, **Tas.**, **Macquarie I.**

Ceramanus E.D.Cooper

Ref.: Cooper et al. 2013 (tax.)

Manus is a fourth declension feminine noun.

Ceramanus centipes (Taylor ex Gotsche, Lindenb. & Nees) E.D.Cooper

= *Jungermannia centipes* Taylor ex Gottsche, Lindenb. & Nees

≡ *Lepidozia centipes* Taylor ex Gottsche, Lindenb. & Nees

Telaranea centipes (Taylor) R.M.Schust.

Ref.: Cooper et al. 2013 (tax.); Engel & Smith Merrill 2004 (dist.)

Herbarium voucher: New South Wales: Wolgan Pinnacle, Newnes State Forest, 5 May 1991, *R.G. Coveny & P.D. Hind 15289* (HO 531939).

Qld, **NSW**, **Vic.**, **Tas.**, **WA**

Ceramanus clatritexta (Steph.) E.D.Cooper

≡ *Lepidozia clatritexta* Steph.

Telaranea clatritexta (Steph.) J.J.Engel & G.L.Merr.

= *Lepidozia whiteleggeana* Steph.

= *Lepidozia complanata* Herzog

Ref.: Cooper et al. 2013 (tax.); Engel & Smith Merrill 2004 (dist.)

Herbarium voucher: Western Australia: base of Mount Frankland, Mount Frankland National Park, 27 Aug. 2009, *E.D. Cooper 9052* (NSW 858665).

The type of *Lepiozia whiteleggeana* Steph. was collected from Cooks River, Botany Bay, and represents the only known gathering of *Ceramanus clatritexta* from New South Wales. The provenance of the *L. whiteleggeana* type gathering is questionable, it is one of at least two species attributed by Whitelegge to this locality that are otherwise unknown in NSW.

WA, **?NSW**

Ceramanus elegans (Colenso) E.D.Cooper

≡ *Lepidozia elegans* Colenso

Telaranea elegans (Colenso) J.J.Engel & G.L.Merr.

= *Lepidozia tripilosa* Steph.

Ref.: Cooper et al. 2013 (tax.); Engel & Smith Merrill 2004 (dist.)

Herbarium voucher: New South Wales: Centennial Glen, Blackheath, 17 Mar. 2007, *E.D. Cooper 17* (NSW 857789).

Qld, **NSW**

Ceramanus grossiseta (Steph.) E.D.Cooper

≡ *Lepidozia grossiseta* Steph.

Telaranea grossiseta (Steph.) J.J.Engel & R.M.Schust.

Ref.: Cooper et al. 2013 (tax.); Engel & Smith Merrill 2004 (dist.)

Herbarium voucher: Tasmania: Gordon River, vicinity of Sir John Falls, just up river from Butler Island, 25 Feb. 1977, *J.J. Engel 14728* (NSW 665591).

Tas.

Ceratolejeunea (Spruce) Jack & Steph.

≡ *Lejeunea subg. Ceratolejeunea* Spruce

Ref.: Söderström et al. 2015 (tax.)

Ceratolejeunea belangeriana (Gottsche) Steph.

≡ *Lejeunea belangeriana* Gottsche

= *Lejeunea oceanica* Mitt.

Ceratolejeunea oceanica (Mitt.) Steph.

Ref.: Söderström et al. 2010 (tax.)

Herbarium voucher: Queensland: Mossman Gorge, Rex Creek, above intersection with Rex Loop track, Daintree National Park, 10 Jul. 2005, *E.A. Brown & M.A.M. Renner* (NSW887366).

Qld

Chaetophyllopsis R.M.Schust.

Ref.: Crandall-Stotler et al. 2009b (tax.)

Chaetophyllopsis whiteleggei (Carrington & Pearson) R.M.Schust.

≡ *Jungermannia whiteleggei* Carrington & Pearson

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Western Australia: Summertime Track. [S of Manjimup.], D'Entrecasteaux National Park, 2009, *E.D. Cooper 2009/108* (NSW 858536).

WA, **SA**, **NSW**, **Vic.**, **Tas.**

Chandonanthus Mitt.

Ref.: Crandall-Stotler et al. 2009b (tax.)

Chandonanthus squarrosus (Menzies ex Hook.) Mitt.

≡ *Jungermannia squarrosa* Menzies ex Hook.

= *Anastrophyllum tasmanicum* Rodway

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Cradle Mountain Lake St Clair National Park, Cradle Mountain end, track to Marion Lookout from Dove Lake, 28 Apr. 2001, *N. Klazenga 5786* (HO 523118).

Records from Queensland and northern New South Wales are misidentifications of *Plicanthus hirtellus*.

Vic., **Tas.**

Cheilolejeunea (Spruce) Steph.

≡ *Lejeunea* subg. *Cheilolejeunea* Spruce

= *Leucolejeunea* A.Evans

Ref.: Söderström et al. 2015 (tax.)

The authorship of this genus, and others based on Sprucean subgenera, has been clarified by the addition of Article 41.4 and examples to the ICN (Turland et al. 2018). *Cheilolejeunea* has been conserved over *Omphalanthus* (Ye et al. 2011).

Cheilolejeunea albovirens (Hook.f. & Taylor) E.A.Hodgs.

≡ *Jungermannia albovirens* Hook.f. & Taylor

Ref.: Grolle 1982 (tax., dist.)

Herbarium voucher: Tasmania: Lake Skinner Track, 5 Feb. 1978, *A.V. Ratkowsky H891* (CBG 8205162.1).

Tas., Macquarie I.

Cheilolejeunea campbelliensis (Steph.) R.M.Schust.

≡ *Strepsilejeunea campbelliensis* Steph.

= *Cheilolejeunea celata* M.A.M.Renner & Glenny

Ref.: Grolle 1982 (tax., dist.)

Herbarium voucher: Tasmania: Mt Snowy South, above Lake Skinner Track, 5 Feb. 1978, *A.V. Ratkowsky H985* (CBG 8205164.1).

Tas.

Cheilolejeunea ceylanica (Gottsche) R.M.Schust. & Kachroo

≡ *Lejeunea ceylanica* Gottsche

Ref.: Thiers 1997 (tax., dist.)

Qld

Cheilolejeunea clavata Mizut.

Ref.: Thiers 1997 (tax., dist.)

Herbarium voucher: Queensland: Dinner Creek Falls, Mount Hypipamee National Park, 31 May 2014, *M.A.M. Renner & T.C. Wilson 7063* (NSW882182).

Qld

Cheilolejeunea comitans (Hook.f. & Taylor) R.M.Schust.

≡ *Strepsilejeunea comitans* (Hook.f. & Taylor) Steph.

Lejeunea comitans Hook.f. & Taylor

Ref.: Grolle 1982 (dist.)

Herbarium voucher: Tasmania: Granville Harbour, 16 May 2013, *J. Jarman* (HO 570624).

Cheilolejeunea comitans was synonymised with *Cheilolejeunea krakakammae* by Zhu (2004), despite the presence of morphological differences between these two species. Beveridge et al. (2021) combined morphological and molecular phylogenetic evidence to formally reinstate *C. comitans*. We here accept the narrower circumscription of *C. krakakammae* and recognition of *C. comitans* as distinct as proposed by Beveridge et al. (2022). Zhu (2006) recorded *C. krakakammae* for New South Wales, presumably on the basis of a specimen of *C. comitans*, but we have been unable to verify this report.

Tas.

Cheilolejeunea decursiva (Sande Lac.) R.M.Schust.

≡ *Lejeunea decursiva* Sande Lac.

= *Trachylejeunea oahuensis* A.Evans

= *Cheilolejeunea tisserantii* Vanden Berghen & Jovet-Ast

= *Cheilolejeunea spathulata* Mizut.

Ref.: Zhu & Lai 2005 (tax., dist.)

Herbarium voucher: Queensland: Barron State Forest, Herberton Range, 11 km SSW of Atherton, 2 Mar. 1983, *H. Streimann 27266*, *p.p.* (CANB 643453.1).

Qld

Cheilolejeunea falsinervis (Sande Lac.) Kachroo & R.M.Schust.

≡ *Lejeunea falsinervis* Sande Lac.

Pycnolejeunea falsinervis (Sande Lac.) Schiffn.

Ref.: Thiers 1997 (tax., dist.)

Herbarium voucher: New South Wales: Sassafras Stream, Eastern end of Never Never Picnic Area Road, Dorrigo National Park, 8 Sep. 2018, *M.A.M. Renner, L. Shu & R-L. Zhu 8842* (NSW 1053630).

Qld, **NSW**

Cheilolejeunea gardneri (Mitt.) Mizut.

≡ *Lejeunea gardneri* Mitt.

Ref.: Thiers 1992a (tax.)

Cheilolejeunea gardneri was included as a distinct species by Thiers (1992) who stated she had seen only the type specimens, and no others corresponding to this species among many *C. meyeniana* examined. The species was not mentioned in Thiers (1997) treatment of *Cheilolejeunea* in Australia. *Cheilolejeunea gardneri* was included in the key to Australian species by Zhu & Lai (2005) without explanation, no specimens supporting this record exist in Australian institutions, we therefore regard the presence of *Cheilolejeunea gardneri* in Australia as unresolved.

?Austr.

Cheilolejeunea hallingii B.M.Thiers

Ref.: Thiers 1997 (tax.)

Herbarium voucher: Queensland: North coast region: Cape Tribulation National Park, Noah Head section, 30 km N of the

Daintree River ferry, lowland rainforest, 0.5 km inland from coast, *Theirs & Halling 2675* (AD, NY)

Qld

Cheilolejeunea incisa (Gottsche, Lindenb. & Nees) R.M.Schust. & Kachroo

≡ *Lejeunea incisa* Gottsche, Lindenb. & Nees

Ref.: Thiers 1997 (tax.)

Cheilolejeunea incisa var. **teretiflora** B.M.Thiers

Ref.: Thiers 1997 (tax., dist.)

Herbarium voucher: Queensland: Mount Lewis Road, Mount Lewis National Park, 13 Sep. 2018, *M.A.M. Renner, L. Shu & R-L. Zhu 9019* (NSW 1053565).

Qld

Cheilolejeunea intertexta (Lindenb.) Steph.

≡ *Lejeunea intertexta* Lindenb.

Ref.: Grolle 1982 (tax., dist.)

Herbarium voucher: New South Wales: Off Tintenbar Road, 1 3/4 miles [2.4 km] from Ballina, 30 May 1902, *W.W. Watts 385* (NSW 409164).

Pycnolejeunea glauca was recently reinstated from synonymy of *Cheilolejeunea intertexta*, as *Cheilolejeunea glauca*, see Beveridge et al. (2020).

Qld, **NSW**, **Norfolk I.**

Cheilolejeunea longidens (Steph.) R.M.Schust. & Kachroo

≡ *Pycnolejeunea longidens* Steph.

Ref.: Grolle 1982 (tax., dist.)

Herbarium voucher: Queensland: Cooroo Logging Area, 16 km WNW of Innisfail, 27 Jun. 1984, *H. Streimann 29950*, *p.p.* (CANB 897846.1).

Qld, **NSW**

Cheilolejeunea meyeniana (Gottsche, Lindenb. & Nees) R.M.Schust. & Kachroo

≡ *Lejeunea meyeniana* Gottsche, Lindenb. & Nees

= *Pycnolejeunea wattsiana* Steph.

Ref.: Thiers 1997 (tax., dist.)

Herbarium voucher: Queensland: Track to Cloudy Creek, Paluma Range National Park, 26 Jun. 2005, *E.A. Brown & M.A.M. Renner 1592* (NSW 1004997).

We follow Theirs (1992, 1997) in maintaining *Cheilolejeunea meyeniana* and *C. trapezia* as distinct species.

Qld, **Lord Howe I.**

Cheilolejeunea mimosa (Hook.f. & Taylor) R.M.Schust.

≡ *Jungermannia mimosa* Hook.f. & Taylor

Lejeunea mimosa (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

Strepsilejeunea mimosa (Hook.f. & Taylor) Steph.

= *Strepsilejeunea austrina* Spruce ex Watts

= *Jungermannia implexicaulis* Hook.f. & Taylor

Lejeunea implexicaulis (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

Cheilolejeunea implexicaulis (Hook.f. & Taylor) R.M.Schust.

= *Cheilolejeunea hobartiensis* Pearson

= *Cheilolejeunea weymouthiana* Steph.

= *Strepsilejeunea austrina* Spruce ex Steph., *nom. inval.*

Ref.: Grolle 1982 (tax., dist.)

Herbarium voucher: Tasmania: Manuka Road, unlogged coupe WR008K, 28 May 2002, *J. Jarman* (HO 578226).

The name *Cheilolejeunea mimosa* has been widely applied throughout Australia to small, non-descript *Cheilolejeunea*. Such broad application is likely inappropriate, as *Cheilolejeunea mimosa* sensu the type specimen is an inhabitant of cold-temperate forests, scrubs, and subalpine habitats, and in Australia is likely confined to these in the high country of New South Wales, Victoria, and Tasmania.

NSW, **Vic.**, **Tas.**

Cheilolejeunea norrisii (Grolle) M.A.M.Renner

≡ *Lejeunea norrisii* Grolle

Ref.: Renner 2012 (tax., dist.)

Herbarium voucher: Tasmania: Esperance Municipality, 146°44.9′E 43°06.9′S, 50–100 m on moist, diffusely lit twigs of *Arthrotaxus* in *Nothofagus* forest with scattered tall *Eucalyptus* at the Tahune Picnic Area Nature Trail, *Norris 22931* (JE!)

Known with certainty from the type and paratype gatherings only. *Cheilolejeunea norrisii* is a very distinctive plant that is unlikely to be confused with any other species.

Tas.

Cheilolejeunea occlusa (Herzog) T.Kodama & N.Kitag.

≡ *Strepsilejeunea occlusa* Herzog

Ref.: Pócs 2015 (tax., dist.)

Reported new for Australia by Pócs (2015) based on material gathered in the Daintree River by Pócs and Streimann, unfortunately Pócs (2015) does not cite a voucher specimen in support of this new record. We accept this record in deference to Prof. Pócs knowledge of the tropical epiphytic bryophyte flora, and his particular expertise in Lejeuneaceae.

Qld

Cheilolejeunea oscilla M.A.M.Renner

Ref.: Renner 2012 (tax., dist.)

Herbarium voucher: Queensland: Vicinity of Cardwell, Five Miles Creek Road, adjacent power cables, 1 Jul. 2005, *E.A. Brown & M.A.M. Renner 1646* (NSW 866201).

Qld

Cheilolejeunea parvidens B.M.Thiers

Ref.: Thiers 1997 (tax., dist.)

Herbarium voucher: Queensland: Witts Lookout track start on edge of forest, Paluma Range National Park, 26 Jun. 2005, *E.A. Brown & M.A.M. Renner 1583* (NSW 1004989).

Qld, **Lord Howe I.**

Cheilolejeunea serpentina (Mitt.) Mizut.

≡ *Lejeunea serpentina* Mitt.

Ref.: Thiers 1997 (tax., dist.)

Herbarium voucher: Queensland: Dalrymple Creek track, near crossing. Cardwell, 1 Sep. 1985, *G.A.M. Scott* (MELU H108806a).

Qld

Cheilolejeunea streimannii Pócs & Ninh

Ref.: Pócs & Ninh 2005 (tax., dist.)

Herbarium voucher: Queensland: *Pócs & Streimann 9990/S* (EGR)

Qld

Cheilolejeunea trapezia (Nees) Kachroo & R.M.Schust.

= *Jungermannia thymifolia var. imbricata* Nees

Lejeunea imbricata (Nees) Nees

Cheilolejeunea imbricata (Nees) S.Hatt.

= *Pycnolejeunea curvatiloba* Steph.

≡ *Jungermannia trapezia* Nees

Ref.: Thiers 1997 (tax., dist.)

Herbarium voucher: Queensland: Thornton Peak, track to summit from Hilda Creek, on summit plateau, Daintree National Park, 17 Aug. 2017, *M.A.M. Renner, A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys 8592* (NSW 1061114).

Qld, **NSW**

Cheilolejeunea trifaria (Reinw., Blume & Nees) Mizut.

≡ *Jungermannia trifaria* Reinw., Blume & Nees

= *Euosmolejeunea baileyana* Steph.

Ref.: Grolle 1982 (tax., dist.)

Herbarium voucher: Queensland: Finch Hatton Gorge, Eungella National Park, 22 Jun. 2005, *E.A. Brown & M.A.M. Renner 1513* (NSW 866066).

Qld, NSW

Cheilolejeunea ventricosa (Schiffn. ex P.Syd.) X.-L.He

≡ *Pycnolejeunea ventricosa* Schiffn. ex P.Syd.

= *Pycnolejeunea ventricosa* Schiffn., *nom. inval.*

= *Pycnolejeunea fitzgeraldii* Steph.

Ref.: Zhu & Lai 2005 (tax., dist.)

Herbarium voucher: New South Wales: Rosewood Loop, small sharp gully from track, Dorrigo National Park, 8 Sep. 2018, *M.A.M. Renner, L. Shu & R-L. Zhu 8881b* (NSW 1053675).

Qld, **NSW**

Cheilolejeunea vittata (Steph. ex Hoffm.) R.M.Schust. & Kachroo

≡ *Pycnolejeunea vittata* Steph. ex G.Hoffm.

Ref.: Thiers 1997 (tax., dist.)

Herbarium voucher: Queensland: Dalrymple Creek track, half way from watershed to creek. Cardwell, 1 Sep. 1985, *G.A.M. Scott* (MELU H108812a).

Qld

Cheilolejeunea xanthocarpa (Lehm. & Lindenb.) Malombe

≡ *Jungermannia xanthocarpa* Lehm. & Lindenb.

Leucolejeunea xanthocarpa (Lehm. & Lindenb.) A.Evans

Ref.: Malombe 2009 (tax.)

Herbarium voucher: Queensland: Alma Gap, 20 km NW of Cardwell, 20 Jun. 1984, *H. Streimann 28737* (CBG 8406744.1).

Qld, **NSW**

Chiastocaulon Carl

= *Acrochila* R.M.Schust.

= *Plagiochilion* S.Hatt.

Ref.: Groth & Heinrichs 2003 (tax.)

Chiastocaulon biseriale (Lehm. & Lindenb.) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs

≡ *Plagiochila biserialis* Lehm. & Lindenb.

Acrochila biserialis (Lehm. & Lindenb.) Grolle

= *Plagiochila simpsonii* W.Martin & E.A.Hodgs.

Ref.: Renner et al. 2016b (tax., dist.)

Herbarium voucher: Tasmania: Mackintosh Creek headwater, 24 Feb. 2002, *A. Moscal 31333B* (HO 567280).

Vic., **Tas.**

Chiastocaulon braunianum (Nees) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs

≡ *Jungermannia brauniana* Nees

Ref.: Renner et al. 2016b (tax., dist.)

Herbarium voucher: Queensland: Kahlpalim Rock, vicinity of summit, Dinden National Park, 12 May 2014, *M.A.M. Renner & T.C. Wilson 6925* (NSW 855115).

Qld

Chiastocaulon dendroides (Nees) Carl

≡ *Jungermannia dendroides* Nees

Plagiochila dendroides (Nees) Lindenb.

Ref.: Renner et al. 2016b (tax., dist.)

Herbarium voucher: Queensland: Kahlpalim Rock, vicinity of summit, Dinden National Park, 12 May 2014, *M.A.M. Renner & T.C. Wilson 6920*b (NSW 855500).

Qld

Chiastocaulon fasciculatum M.A.M.Renner

Ref.: Renner & Worboys 2018 (tax., dist.)

Herbarium voucher: Queensland: Thornton Peak, track to summit from Hilda Creek, ridge on summit plateau, Daintree National Park, 16 Aug. 2017, *M.A.M. Renner, A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys 8556* (NSW 1061080).

Qld

Chiastocaulon flamabile M.A.M.Renner

Ref.: Renner et al. 2016b (tax., dist.)

Herbarium voucher: Tasmania: Mt Oakleigh, 2 Jan. 1983, *A.V. Ratkowsky* (HO 304469).

Tas.

Chiastocaulon geminifolium (Mitt.) M.A.M.Renner

≡ *Plagiochila geminifolia* Mitt.

Ref.: Renner et al. 2016b (tax., dist.)

Herbarium voucher: Queensland: Bellenden Ker Range, Russell River catchment, track to Choorichillum from end of Gourka Road, between NW summit and Choorichillum, Wooroonooran National Park, 30 Mar. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 6424* (NSW 896963).

Qld

Chiastocaulon oppositum (Reinw., Blume & Nees) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs

≡ *Jungermannia opposita* Reinw., Blume & Nees

Plagiochilion oppositum (Reinw., Blume & Nees) S.Hatt.

Ref.: Renner et al. 2016b (tax., dist.)

Herbarium voucher: Queensland: Paluma, track to Cloudy Creek, Paluma Range National Park, 8 May 2014, *M.A.M. Renner & T.C. Wilson 6886* (NSW870374).

Qld

Chiastocaulon pachycephalum (De Not.) Herzog

≡ *Plagiochila pachycephala* De Not.

Plagiochilion pachycephalum (De Not.) Inoue

Ref.: Renner & Worboys 2018 (tax., dist.)

Herbarium voucher: Queensland: Mt Finnigan, on and flanks of the summit, Cedar Bay National Park, 8 Jun. 2017, *H. Hancock, T. Houghton, M.A.M. Renner, L. Roberts, A. Rouse & S. Worboys 8022* (NSW 1060508).

Qld

Chiastocaulon proliferum (Mitt.) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs

≡ *Plagiochila prolifera* Mitt.

Ref.: Renner et al. 2016b (tax., dist.)

Herbarium voucher: Tasmania: Williamsford - Montezuma Falls track, 7 km SW of Rosebery, 9 May 1997, *H. Streimann 59563* (HO 443486).

Tas.

Chiloscyphus Corda, *nom. cons.*

Ref.: Engel & Glenny 2019a (tax.)

Chiloscyphus austrigenus (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

≡ *Jungermannia austrigena* Hook.f. & Taylor

Chiloscyphus austrigenus subsp. **okaritanus** (Steph.) J.J.Engel

≡ *Lophocolea okaritana* Steph.

= *Lophocolea gunniana* Nees

= *Chiloscyphus affinis* Gottsche

Heteroscyphus affinis (Gottsche) J.J.Engel & R.M.Schust.

= *Lophocolea austrigena* f. *bifida* Rodway

= *Lophocolea cordifolia* Steph.

= *Chiloscyphus muelleri* Gottsche

Heteroscyphus muelleri (Gottsche) J.J.Engel & R.M.Schust.

Ref.: Engel 2010 (tax., dist.)

Herbarium voucher: Tasmania: Mt Rufus, Lake St Clair National Park, 10 Mar. 1979, *A.V. Ratkowsky 79/13* (HO 559382).

NSW, **Vic.**, **Tas.**

Chiloscyphus bispinosus (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

≡ *Jungermannia bispinosa* Hook.f. & Taylor

Lophocolea bispinosa (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

Ref.: Engel 2010 (tax., dist.)

Tasmanian records are possibly all misidentifications of *Chiloscyphus subporosus*. The presence of this amphipacific species in Australia requires confirmation (Engel 2010).

?Tas.

Chiloscyphus canaliculatus Gottsche, Lindenb. & Nees

Ref.: Engel 2010 (tax.)

Chiloscyphus canaliculatus var. **canaliculatus**

= *Lophocolea oldfieldiana* Steph.

Chiloscyphus oldfieldianus (Steph.) J.J.Engel & R.M.Schust.

= *Lophocolea wattsiana* Steph.

Chiloscyphus wattsianus (Steph.) J.J.Engel & R.M.Schust.

Ref.: Engel 2010 (tax., dist.)

Herbarium voucher: Tasmania: The Giants Grave, Cataract Gorge, Launceston, 20 Nov. 1911, *W.A. Weymouth 1299* (HO 57969).

NSW, **Vic.**, **Tas.**

Chiloscyphus cuspidatus (Nees) J.J.Engel & R.M.Schust.

≡ *Lophocolea bidentata* f. *cuspidata* Nees

Lophocolea cuspidata (Nees) Limpr.

= *Lophocolea mooreana* Steph.

Ref.: Engel 2010 (tax., dist.)

Herbarium voucher: Tasmania: Mt Wellington, above Disappearing Tarn, 26 Dec. 1979, *A.V. Ratkowsky 79/86* (HO 559387).

Engel (2010) incorrectly states variety as the rank of the basionym.

NSW, **ACT**, **Tas.**

Chiloscyphus excisifolius (Steph.) J.J.Engel & R.M.Schust.

≡ *Lophocolea excisifolia* Steph.

Ref.: Engel 2010 (tax., dist.)

Herbarium voucher: New South Wales: Yarrangobilly Caves, Jan. 1906, *W.W. Watts Hepat 924*(*a*) (NSW 817911).

NSW, **Vic.**

Chiloscyphus fertilis J.J.Engel

Ref.: Engel 2010 (tax., dist.)

Herbarium voucher: New South Wales: Hopkins Creek, Stanwell Park, May 1905, *W.W. Watts Hepat 827* (NSW 815696).

NSW, **ACT**, **Vic.**

Chiloscyphus gippslandicus J.J.Engel & R.M.Schust.

≡ *Lophocolea lauterbachii* Steph.

Ref.: Engel 2010 (tax., dist.)

Herbarium voucher: Tasmania: Lenah Valley Track, Mt Wellington, 23 Jun. 1977, *A.V. Ratkowsky 77/147* (HO 559463).

NSW, **ACT**, **Vic.**, **Tas.**

Chiloscyphus howeanus (Steph.) J.J.Engel & R.M.Schust.

≡ *Lophocolea howeana* Steph.

Ref.: Engel & Schuster 1984 (tax.)

Herbarium voucher: New South Wales: Max Nicholls Track, 20 Jun. 1992, *H. Streimann 49870* (CBG 9218771.1).

On Lord Howe Island *Chiloscyphus howeanus* has been confused with *Chiloscyphus bispinosus*.

Lord Howe I.

Chiloscyphus longiciliatus (Steph.) J.J.Engel & R.M.Schust.

≡ *Lophocolea longiciliata* Herzog

Ref.: Engel 2010 (tax., dist.)

Herbarium voucher: Tasmania: immediately below summit of Black Bluff, SW of Nietta, 20 Mar. 1983, *J.J. Engel 19820* (HO 571719).

Tas.

Chiloscyphus monoicus J.J.Engel & R.M.Schust.

≡ *Lophocolea floribunda* Steph.

Ref.: Engel 2010 (tax., dist.)

Herbarium voucher: New South Wales: Above Captain Fraser's, E Ballina, Richmond River, without date, *W.W. Watts Hepat 261* (NSW 817870).

NSW

Chiloscyphus muricatus (Lehm.) J.J.Engel & R.M.Schust.

≡ *Jungermannia muricata* Lehm.

Lophocolea muricata (Lehm.) Nees

= *Lophocolea hirtifolia* Hook.f. & Taylor

Ref.: Engel 2010 (dist.)

Herbarium voucher: Queensland: Bellenden Ker Range, Russell River catchment, track to Choorichillum from end of Gourka Road, between NW summit and Choorichillum, Wooroonooran National Park, 30 Mar. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 6428* (NSW 896967).

WA, **Qld**, **NSW**, **ACT**, **Vic.**, **Tas.**

Chiloscyphus novae-zeelandiae (Lehm. & Lindenb.) J.J.Engel & R.M.Schust.

≡ *Jungermannia novae-zeelandiae* Lehm. & Lindenb.

Ref.: Engel & Glenny 2019a (tax.); Engel 2010 (dist.)

Qld, **NSW**, **ACT**, **Vic.**, **Tas.**

Chiloscyphus novae-zeelandiae var. **grandistipulus** (Schiffn.) J.J.Engel

≡ *Lophocolea grandistipula* Schiffn.

= *Lophocolea rotundistipula* Steph.

= *Lophocolea australis* Gottsche

= *Lophocolea austroalpina* Steph.

Ref.: Engel 2010 (tax.)

Herbarium voucher: Tasmania: King River - Dubbilbarril, 7 Jan. 1914, *W.A. Weymouth 1434* (HO 57826).

NSW, **Vic.**, **Tas.**, **Macquarie I.**

Chiloscyphus novae-zeelandiae var. **meridionalis** (Steph.) J.J.Engel

≡ *Lophocolea meridionalis* Steph.

= *Chiloscyphus dargonius* Gottsche

Lophocolea dargonia (Gottsche) Steph.

Ref.: Engel 2010 (tax., dist.)

Herbarium voucher: Tasmania: Great Western Tiers, plateau near Lake Salome, W of Walls of Jerusalem. Lake Adelaide, 25 Mar. 1977, *J.J. Engel 15958* (CANB 805562.1).

NSW, **Tas.**

Chiloscyphus novae-zeelandiae var. **novae-zeelandiae**

= *Lophocolea novae-zeelandiae* (Lehm. & Lindenb.) Nees

= *Lophocolea sellingii* S.W.Arnell

Chiloscyphus sellingii (S.W.Arnell) J.J.Engel & R.M.Schust.

= *Lophocolea macrostipula* Steph.

Chiloscyphus macrostipulus (Steph.) J.J.Engel & R.M.Schust.

Ref.: Engel 2010 (tax., dist.)

Herbarium voucher: Tasmania: Great Western Tiers, Walls of Jerusalem National Park, Lake Loane, 15 April. 1983, *J.J. Engel 20161* (HO 571667).

Qld, **NSW**, **ACT**, **Vic.**, **Tas.**

Chiloscyphus perpusillus (Hook.f. & Taylor) J.J.Engel

≡ *Jungermannia perpusilla* Hook.f. & Taylor

Lophocolea perpusilla (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

= *Lophocolea macroloba* Steph.

Chiloscyphus macrolobus (Steph.) J.J.Engel & R.M.Schust.

= *Lophocolea brevis* Steph.

Chiloscyphus brevis (Steph.) J.J.Engel & R.M.Schust.

= *Lophocolea decolorata* Steph.

Chiloscyphus decoloratus (Steph.) J.J.Engel & R.M.Schust.

Ref.: Engel 2010 (tax., dist.)

Herbarium voucher: Tasmania: Mt Rufus, Lake St Clair National Park, 11 Nov. 1978, *A.V. Ratkowsky* 78/131 (HO 559408).

Tas.

Chiloscyphus rarus (Steph.) J.J.Engel & R.M.Schust.

≡ *Lophocolea rara* Steph.

Herbarium voucher: Type from Tas.

This species has not been studied recently, it is accepted in this catalogue with reservations.

Tas.

Chiloscyphus rupicola (Steph.) J.J.Engel & R.M.Schust.

≡ *Lophocolea rupicola* Steph.

= *Lophocolea spongiosa* Steph.

Chiloscyphus spongiosus (Steph.) J.J.Engel & R.M.Schust.

= *Lophocolea heterophylloides* var. *macrocalyx* Pearson

= *Lophocolea fissistipula* Steph.

Chiloscyphus fissistipulus (Steph.) J.J.Engel & R.M.Schust.

= *Lophocolea variabilis* Steph., *nom. illeg.*

Ref.: Engel 2010 (tax., dist.)

Herbarium voucher: Tasmania: Mt Field National Park, 25 Nov. 1978, *A.V. Ratkowsky* 78/148 (HO 559405).

Tas.

Chiloscyphus semiteres (Lehm. & Lindenb.) Lehm. & Lindenb.

≡ *Jungermannia semiteres* Lehm.

Lophocolea semiteres (Lehm.) Mitt.

= *Lophocolea squamata* Herzog

Chiloscyphus squamatus (Herzog) J.J.Engel & R.M.Schust.

Ref.: Engel 2010 (tax., dist.)

Chiloscyphus semiteres var. **retusus** J.J.Engel

Ref.: Engel & Glenny 2019a (tax., dist.)

NSW, **ACT**

Chiloscyphus semiteres var. **semiteres**

= *Jungermannia bridelii* Lehm. & Lindenb.

= *Lophocolea heterophylloides* Nees

= *Lophocolea dalliana* Steph.

= *Lophocolea forsythiana* Steph.

= *Lophocolea geheebii* Steph.

= *Jungermannia canaliculata* Brid. ex Bonner, *nom. inval.*

Ref.: Engel & Glenny 2019a (tax.)

Herbarium voucher: Tasmania: Near Huon River, N of Hartz Mountains National Park, Tahune Forest Reserve, 28 Mar. 1983, *J.J. Engel 19882* (NSW 892174).

WA, **SA**, **Qld**, **NSW**, **ACT**, **Vic.**, **Tas.**, **Lord Howe I.**, **Macquarie I.**

Chiloscyphus subemarginatus (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

≡ *Lophocolea subemarginata* Hook.f. & Taylor

Leptoscyphus subemarginatus (Hook.f. & Taylor) J.J.Engel

= *Lophocolea corticola* Steph.

Chiloscyphus corticola (Steph.) J.J.Engel & R.M.Schust.

= *Lophocolea longistipula* Steph.

Leptoscyphus longistipulus (Hook.f. & Taylor) J.J.Engel

Chiloscyphus longistipulus (Steph.) J.J.Engel & R.M.Schust.

Ref.: Engel & Glenny 2019a (tax., dist.)

Tas.

Chiloscyphus subporosus (Mitt.) J.J.Engel & R.M.Schust.

≡ *Lophocolea subporosa* Mitt.

Ref.: Engel 2010 (tax., dist.)

Chiloscyphus subporosus var. **subporosus**

= *Lophocolea argentea* Steph.

Ref.: Engel & Glenny 2019a (tax.); Engel 2010 (dist.)

Herbarium voucher: New South Wales: Berry - Kangaroo Valley, 7 km W of Berry, 17 Sep. 1980, *H. Streimann 10558* (CBG 8006861.1).

NSW, **ACT**, **Tas.**

Chonecolea Grolle

Ref.: Patzak et al. 2016b (tax.)

Chonecolea doellingeri (Nees) Grolle

≡ *Jungermannia doellingeri* Nees

Ref.: Patzak et al. 2016b (tax.)

Herbarium voucher: Queensland: Portland Roads Road, Gordon Creek catchment, Claudie Stream, at head of Old Coen trail,

Kutini-Payamu (Iron Range) National Park, 28 May 2014, *M.A.M. Renner & T.C. Wilson 7048* (NSW 1001748).

Regarded as adventive in Australia following its discovery in the Royal Botanic Gardens, Sydney and adjacent parklands in central Sydney in 1989 (Brown & Coveny 1999) during a brief La Niña. The central Sydney population persisted until late 1991, after which it died out, probably as a result of the prolonged El Niño dominated summers between 1991 and 1998. Occurrences of *Chonecolea dollingeri* in natural settings were located in northern Queensland in 2012 and 2014, at Carnarvon Gorge and the Iron Range. *Chonecolea dollingeri* is here accepted as indigenous to Australia. It is possible the Sydney colony was derived from indigenous sources when host plants, perhaps cycads, were translocated to the Royal Botanic Gardens.

Qld, **NSW**

Clandarium (Grolle) R.M.Schust.

≡ *Blepharidophyllum subg. Clandarium* Grolle

Clandarium xiphophyllum (Grolle) R.M.Schust.

≡ *Blepharidophyllum xiphophyllum* Grolle

= *Diplophyllum densifolium f. decurvum* Rodway

Ref.: Engel & Glenny 2019a (tax.)

Herbarium voucher: Tasmania: Arthur Range, Mount Hesperus, S of track to summit at the top of the hill, Southwest Conservation Area, 24 Jan. 2012, *M.A.M. Renner 5967* (NSW 880821).

Tas.

Clasmatocolea Spruce

Ref.: Engel & Glenny 2019a (tax.)

Molecular phylogenetic studies resolve *Clasmatocolea* nested within a broader *Chiloscyphus* clade, rendering the latter paraphyletic. There have been two proposed solutions to the paraphyly of *Chiloscyphus*, one is to restrict *Chiloscyphus* to two species, and reinstate *Lophocolea* for the remainder, in order to maintain *Clasmatocolea*, *Pachyglossa*, and other segregates. The other is to broaden the circumscription of *Chiloscyphus* to include the genera nested within it. However, relationships within *Chiloscyphus* sens. lat. are not well resolved on existing molecular data, and further investigation is required to resolve relationships before a durable resolution can be proposed. Until a clear picture of relationships within *Chiloscyphus* sens. lat. has been achieved, we continue to recognise *Clasmatocolea*, acknowledging that doing so renders *Chiloscyphus* paraphyletic.

Clasmatocolea humilis (Hook.f. & Taylor) Grolle

≡ *Jungermannia humilis* Hook.f. & Taylor

Lophocolea humilis (Hook.f. & Taylor) Steph.

Chiloscyphus humilis (Hook.f. & Taylor) Hassel

Clasmatocolea humilis var. humilis

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: New South Wales: Blue Lake, Kosciuszko National Park, *H. Streimann 47076* (CBG 9107057.1).

NSW, Macquarie I.

Clasmatocolea inflexispina (Hook.f. & Taylor) J.J.Engel

≡ *Jungermannia inflexispina* Hook.f. & Taylor

Chiloscyphus inflexispinus (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Lophocolea inflexispina (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

= *Lophocolea amplectens* Mitt.

Clasmatocolea amplectens (Mitt.) J.J.Engel & R.M.Schust.

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: Tasmania: Warners Sugarloaf, 18.5 km S of Deloraine, 26 Nov. 1988, *J.A.Curnow 1945* (CANB 8901197.1).

NSW, **Vic.**, **Tas.**

Clasmatocolea marginata (Steph.) Grolle

≡ *Leioscyphus marginatus* Steph.

Odontoschisma marginatum (Steph.) Steph.

= *Clasmatocolea crassimarginata* Grolle

= *Jungermannia marginata* Mitt., *nom. illeg.*

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: Tasmania: 400 m N of Talleh Lagoons, 14 Feb. 1987, *A. Moscal 14453* (HO 572698).

Tas.

Clasmatocolea notophylla (Hook.f. & Taylor) Grolle

≡ *Jungermannia notophylla* Hook.f. & Taylor

Lophocolea notophylla (Hook.f. & Taylor) E.A.Hodgs.

= *Chiloscyphus cordifolius* Rodway

= *Lophocolea tumida* Steph.

= *Lophocolea cordifolia f. disticha* Rodway

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: Tasmania: Howards Road, 24 Jan. 1992, *J. Jarman* (HO 310210).

Tas.

Clasmatocolea rigens (Hook.f. & Taylor) J.J.Engel

≡ *Jungermannia rigens* Hook.f. & Taylor

Lophocolea rigens (Hook.f. & Taylor) A.Evans

Ref.: Engel & Glenny 2019a (tax.), Engel 2015 (dist.)

Tas.

Clasmatocolea strongylophylla (Hook.f. & Taylor) Grolle

≡ *Jungermannia strongylophylla* Hook.f. & Taylor

Lophocolea strongylophylla (Hook.f. & Taylor) E.A.Hodgs.

Chiloscyphus strongylophyllus (Hook.f. & Taylor) Hassel

= *Jungermannia turgescens* Hook.f. & Taylor

= *Lophocolea angulistipula* Steph.

Clasmatocolea angulistipula (Steph.) Grolle

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: Tasmania: Mt Norold, 24 Feb. 1994, *J. Jarman* (HO 573057).

Tas. Macquarie I.

Clasmatocolea vermicularis (Lehm.) Grolle

≡ *Jungermannia vermicularis* Lehm.

Chiloscyphus vermicularis (Lehm.) Hassel

Ref.: Engel & Glenny 2019a (tax., dist.)

Tas.

Clasmatocolea verrucosa J.J.Engel

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: Tasmania: Mt Mawson, 27 Nov. 2007, *J. Jarman* (HO 572142).

Tas.

Cololejeunea (Spruce) Steph.

≡ *Lejeunea subg. Cololejeunea* Spruce

= *Aphanolejeunea* A.Evans

Ref.: Söderström et al. 2015 (tax.)

Cololejeunea amphibola B.M.Thiers

≡ *Aphanolejeunea amphibola* (B.M.Thiers) Pócs & Bernecker

Ref.: Pócs 2016 (tax., dist.)

Herbarium voucher: Queensland: Gap Creek tributary, Bloomfield River Road, Cedar Bay National Park, 38 km SSE of Cooktown, 21 Oct. 1995, *H. Streimann 57611C* (CBG 9807750.1).

Qld, **NSW**

Cololejeunea appressa (A.Evans) Benedix

≡ *Leptocolea appressa* A.Evans

Ref.: Pócs 2016 (tax., dist.)

Herbarium voucher: Queensland: Blencoe Creek, Cardwell Range, 48 km NW of Cardwell, 17 Jun. 1986, *H. Streimann 36804* (CBG 9608613.1).

Qld, **NSW**

Cololejeunea cairnsiana Pócs

Ref.: Pócs 2016 (tax., dist.)

Herbarium voucher: Queensland: Paluma Range National Park, Paluma Dam road, 1.6 km N from the Paluma–Ewan Road, 19°00.02′S, 146°10.67′E, 880 m alt., *S. & T. Pócs, A. Cairns, E.A. Brown & Ch. Cargill 01122/Z* (BRI)

Qld

Cololejeunea cardiocarpa (Mont.) A.Evans

≡ *Lejeunea cardiocarpa* Mont.

Ref.: Pócs 2016 (tax., dist.)

Herbarium voucher: New South Wales: Maria River Road; 9 km S along road from junction with Crescent Head Road, Limeburners Creek Nature Reserve, 7 Aug. 2008, *J.A. Curnow, J.A. Elix & H. Lepp 6940* (NSW986690).

Qld, **NSW**

Cololejeunea cordiflora Steph.

Ref.: Pócs 2016 (tax., dist.)

Qld

Cololejeunea diaphana A.Evans

Ref.: Pócs 2016 (tax., dist.)

Cololejeunea diaphana var. **cristulata** R.M.Schust.

Ref.: Pócs 2016 (tax., dist.)

Qld

Cololejeunea elizabethae Meagher & Pócs

Ref.: Meagher & Pócs 2017 (tax., dist.)

Herbarium voucher: New South Wales: Smoking Tree Ridge, on track to Goathouse, above junction with Rocky Run track, 9 Jun. 2000, *E.A. Brown 2000/12* (NSW 444684).

Lord Howe I.

Cololejeunea falcata (Horik.) Benedix

≡ *Physocolea falcata* Horik.

Ref.: Pócs 2016 (tax.)

Cololejeunea falcata var. **falcata**

Ref.: Pócs 2016 (tax., dist.)

Herbarium voucher: New South Wales: Rosewood Loop, small sharp gully from track, Dorrigo National Park, 8 Sep. 2017, *M.A.M. Renner, R.L. Zhu, L. Shu 8870* (NSW 1053654).

Qld, **NSW**

Cololejeunea floccosa (Lehm. & Lindenb.) Steph.

≡ *Jungermannia floccosa* Lehm. & Lindenb.

Ref.: Pócs 2016 (dist.)

Cololejeunea floccosa var. **amoenoides** Tixier

Ref.: Pócs 2016 (tax., dist.)

Qld, **NSW**

Cololejeunea floccosa var. **floccosa**

Ref.: Pócs 2016 (tax., dist.)

Herbarium voucher: New South Wales: Mount Warning summit track, steep talus slope on upper southern side of Mount Warning, Mount Warning National Park, 17 Jun. 2005, *E.A. Brown & M.A.M. Renner 1440* (NSW 865978).

Qld, **NSW**

Cololejeunea floccosa var. **fraseriana** Pócs

Ref.: Pócs 2016 (tax., dist.)

Qld

Cololejeunea gottschei (Steph.) Pande, K.P.Srivast. & Ahmad

≡ *Physocolea gottschei* Steph.

Ref.: Pócs 2016 (tax., dist.)

Qld

Cololejeunea hamata Steph.

= *Cololejeunea bistyla* Steph., *nom. inval.*

Ref.: Pócs 2016 (dist.)

Reported for Australia under the invalid name *Cololejeunea bistyla*.

Norfolk I.

Cololejeunea hasskarliana (Lehm.) Schiffn.

≡ *Lejeunea hasskarliana* Lehm.

= *Leptocolea pallida* Steph.

= *Lejeunea venusta* Sande Lac.

= *Cololejeunea baueriana* Schiffn., *nom. inval.*

Ref.: Pócs 2016 (tax., dist.)

Herbarium voucher: Queensland: Bartle Frere, near NW peak, 16 Jul. 2005, *M.A.M. Renner & E.A. Brown 2266* (NSW 867281).

Qld

Cololejeunea heinarii Pócs

Ref.: Pócs 2016 (tax., dist.)

Herbarium voucher: holotype (CANB).

Qld

Cololejeunea inflata Steph.

= *Physocolea oshimensis* Horik.

Ref.: Pócs 2016 (tax., dist.)

Qld

Cololejeunea inflectens (Mitt.) Benedix

= *Lejeunea inflectens* Mitt.

Ref.: Pócs 2016 (tax., dist.)

Herbarium voucher: Queensland: Paluma Range State Forest, Birthday Creek, James Cook University, Department of Tropical Biology experimental area, 20 Jun. 2001, *S. Pócs, E.A. Brown, T. Pócs, C. Cargill, A. Cairns 1121/AC* (BRI AQ0834550).

Qld

Cololejeunea iwatsukiana (Pócs) Pócs

≡ *Aphanolejeunea iwatsukiana* Pócs

Ref.: Pócs 2016 (tax., dist.)

Herbarium voucher: Queensland: Josephine Falls, 12 km SW of Babinda, 3 Dec. 1990, *J.A. Curnow 3727a* (CANB 871399.1).

Qld

Cololejeunea kapingaensis H.A.Mill.
Ref.: Pócs 2016 (tax., dist.)

Qld

Cololejeunea laevigata (Steph.) R.M.Schust.
≡ *Physocolea laevigata* Steph.
= *Lejeunea laevigata* Mitt., *nom. illeg.*
Ref.: Pócs 2016 (tax.)

Vic., **Tas.**, **Lord Howe I.**

Cololejeunea lanciloba Steph.
= *Leptocolea wattsiana* Steph.
Cololejeunea wattsiana (Steph.) R.M.Schust.
Ref.: Pócs 2016 (tax., dist.)
Herbarium voucher: New South Wales: In Mount Boss State Forest, 35 km WSW from Kempsey, Wilson River Flora Reserve, 24 Feb. 2000, *E.A. Brown, S. Pócs & T. Pócs 0047/T* (NSW 903064).

Qld, **NSW**, **Norfolk I.**

Cololejeunea longifolia (Mitt.) Benedix ex Mizut
≡ *Lejeunea longifolia* Mitt.
Ref.: Pócs 2016 (tax., dist.)

Qld

Cololejeunea mamillata (Angstr.) E.A.Hodgs.
≡ *Lejeunea mamillata* Angstr.
Ref.: Pócs 2016 (tax., dist.)

Qld, **NSW**

Cololejeunea maritima Tixier
Ref.: Pócs 2016 (tax., dist.)
Herbarium voucher: Queensland: First Bay, Coolum, 19 Jun. 1983, *J. Windolf 504* (BRI AQ0722712).

Qld

Cololejeunea obliqua (Nees & Mont.) Schiffn.
≡ *Lejeunea obliqua* Nees & Mont.
Ref.: Pócs 2016 (tax., dist.)

Qld

Cololejeunea ocelloides (Horik.) Mizut.
≡ *Leptocolea ocelloides* Horik.
Ref.: Pócs 2016 (tax., dist.)
Herbarium voucher: Queensland: Mt Finnigan, forested stream between two broken ridges running NW from summit, Cedar Bay National Park, 7 Jun. 2017, *M.A.M. Renner, H. Hancock, T. Houghton, L. Roberts, A. Rouse & S. Worboys 8182b* (NSW 1060654).

Qld

Cololejeunea papillosa (K.I.Goebel) Mizut.
≡ *Physocolea papillosa* K.I.Goebel
= *Aphanolejeunea microscopica var. borneensis* Herzog
= *Aphanolejeunea cyathiphylla* Herzog
Ref.: Pócs 2016 (tax., dist.)

Qld

Cololejeunea peraffinis (Schiffn.) Schiffn.
≡ *Lejeunea peraffinis* Schiffn.
Ref.: Pócs 2016 (tax.)
Cololejeunea peraffinis var. **peraffinis**
Ref.: Pócs 2016 (dist.)
Herbarium voucher: Queensland: Mount Bellenden Ker, summit with communications tower, water supply stream at end of track to NE of communications precinct, Bellenden Ker National Park, 8 Jul. 2005, *E.A. Brown & M.A.M. Renner 1968* (NSW1005670).

Qld

Cololejeunea planissima (Mitt.) Abeyw.
= *Lejeunea planisssima* Mitt.
= *Leptocolea aoshimensis* Horik.
Cololejeunea aoshimensis (Horik.) S.Hatt.
Ref.: Pócs 2016 (tax.)
Cololejeunea planissima var. **planissima**
Ref.: Pócs 2016 (dist.)
Herbarium voucher: *Pócs & Streimann 9962/D*

Qld

Cololejeunea pseudofloccosa (Horik.) Benedix
≡ *Leptocolea pseudofloccosa* Horik.
Ref.: Pócs 2016 (tax., dist.)
Herbarium voucher: Queensland: Paluma Range, McClelland's Lookout at the edge of the plateau, E side of the village, 18 Jun. 2001, *T. Pocs 01109/AD* (CANB 805513.1).

Qld

Cololejeunea raduliloba Steph.
Ref.: Pócs 2016 (tax., dist.)
Herbarium voucher: MELUH108867a

Qld

Cololejeunea reniformis M.A.M.Renner
Ref.: Renner 2020 (tax., dist.)
Herbarium voucher: Queensland: Tully Falls Road, Walters Waterhole Track, to Rhyolite Pinnacle, at river crossing, Tully Falls National Park, 27 Aug. 2014, *L.J. Gray & M.A.M. Renner 7221* (NSW 1061475).

Qld

Cololejeunea schmidtii Steph.
Ref.: Pócs 2016 (tax., dist.)
Herbarium voucher: Queensland: Home Rule Falls along Staty Creek; N spur of Mt Finlayson Range, 32 km SSE of Cooktown, 29 Aug. 1999, *T. Pócs & H. Streimann 9997/F* (NSW723146).

Qld

Cololejeunea sintenisii (Steph.) Pócs
≡ *Aphanolejeunea sintenisii* Steph.
= *Aphanolejeunea angustiloba* Horik.
= *Aphanolejeunea ephemeroides* R.M.Schust.
= *Cololejeunea sintenisii* Steph., *nom. inval.*
Ref.: Söderström et al. 2016 (tax.); Pócs 2016 (dist.)

Qld

Cololejeunea stylosa Steph.
= *Cololejeunea bokorensis* Tixier
Ref.: Söderström et al. 2016 (tax.); Pócs 2016 (dist.)
Herbarium voucher: Queensland: Palmerston Highway, 5 km E of Ravenshoe, 8 Dec. 1990, *J.A. Curnow 3900, p.p.* (CBG 9409854.1).

Qld

Cololejeunea tenella Benedix
Ref.: Pócs 2016 (tax., dist.)

Herbarium voucher: New South Wales: Rosewood Loop, small sharp gully from track, Dorrigo National Park, 8 Sep. 2018, *M.A.M. Renner, L. Shu & R-L. Zhu 8893* (NSW 1053698).

Qld, **NSW**

Cololejeunea thiersiae (Pócs) Pócs

≡ *Aphanolejeunea thiersiae* Pócs

Ref.: Pócs 2016 (tax., dist.)

Qld

Cololejeunea triapiculata (Herzog) Tixier

≡ *Leptocolea triapiculata* Herzog

Ref.: Pócs 2016 (tax., dist.)

Herbarium voucher: Queensland: Atherton Tableland. Bartle Frere, North West summit, Wooroonooran National Park, 1 Sep. 2014, *L.J. Gray & M.A.M. Renner 7291* (NSW 1061590).

Qld, **NSW**

Cololejeunea trichomanis (Gottsche) Besch.

≡ *Lejeunea trichomanis* Gottsche

= *Lejeunea goebelii* Gottsche ex Schiffn.

Cololejeunea goebelii (Gottsche ex Schiffn.) Schiffn.

Ref.: Pócs 2016 (tax., dist.)

Qld

Cololejeunea veillonii Tixier

≡ *Aphanolejeunea veillonii* (Tixier) Pócs

Ref.: Pócs 2016 (tax., dist.)

Qld

Cololejeunea verrucosa Steph.

Ref.: Pócs 2016 (tax., dist.)

Qld

Cololejeunea vidaliana Tixier

Ref.: Pócs 2016 (tax., dist.)

Cololejeunea vidaliana was accepted by Pócs (2016) but regarded as a synonym of *Cololejeunea stylosa* by Pócs and Lee (2016). We continue to recognise this species for Australia following the most recent regional treatment for Australia, which is Pócs (2016).

Qld

Cololejeunea wightii Steph.

= *Cololejeunea norfolkiensis* Steph.

Ref.: Pócs 2016 (tax., dist.)

Qld, **Norfolk I.**

Colura (Dumort.) Dumort.

≡ *Jungermannia sect. Colura* Dumort.

= *Lejeunea* subg. *Colurolejeunea* Spruce

Colurolejeunea (Spruce) Steph., *nom. inval.*

Colura acroloba (Mont. ex Steph.) Jovet-Ast

≡ *Lejeunea acroloba* Prantl

= *Colurolejeunea acroloba* Mont. ex Steph., *nom. inval.*

Ref.: Pócs 2015 (tax., dist.)

Herbarium voucher: Queensland: Centre peak of Mount Bellenden Ker, N of Babinda, Wooroonooran National Park, 24 Aug. 1999, *A. Cairns, T. Pócs, H. Streimann & H. Walker 9981/AA* (NSW 883657).

Qld

Colura apiculata (Schiffn.) Steph.

= *Colurolejeunea apiculara* Schiffn., *nom. inval.*

Ref.: Pócs 2015 (tax., dist.)

Qld

Colura ari (Steph.) Steph.

≡ *Colurolejeunea ari* Steph., *nom. inval.*

Ref.: Pócs 2015 (dist.)

Qld

Colura australiensis Jovet-Ast

Ref.: Pócs 2020 (tax., dist.)

Herbarium voucher: Queensland: Millaa Millaa Falls National Park, 6 Jul. 1984, *R.E. Halling & B.M. Thiers 2279* (BRI AQ0873049).

Qld

Colura bisvoluta Herzog & Jovet-Ast

Ref.: Pócs 2015 (dist.)

Qld

Colura conica (Sande Lac.) K.I.Goebel

Ref.: Pócs 2015 (dist.)

Qld

Colura corynophora (Gottsche, Lindenb. & Nees) Trevis.

≡ *Lejeunea corynophora* Gottsche, Lindenb. & Nees

Ref.: Meagher et al. 2023 (tax., dist.)

Herbarium voucher: Queensland: Paluma Range, Paluma, elev. 895 m, private garden, epiphyll on leaf of rainforest tree, 6 April 2020, *A.Cairns WT-1201* (BRI AQ1045136).

Qld

Colura crispiloba Jovet-Ast

Ref.: Pócs 2020 (tax., dist.)

Herbarium voucher: Queensland: Paluma Range; McClelland's Lookout at the edge of the plateau, east side of Paluma village, 20 Jun. 2001, *E.A. Brown, A. Cairns, C. Cargill, S. Pocs & T. Pocs 1109/W* (BRI AQ0834402).

Qld

Colura herzogii Jovet-Ast

Ref.: Pócs 2020 (tax., dist.)

Qld

Colura imperfecta Steph.

Ref.: Pócs 2020 (tax., dist.)

Herbarium voucher: Queensland: *Pócs & Streimann 99117/AN* (EGR).

Qld

Colura leratii Steph.

= *Colurolejeunea leratii* Steph., *nom. inval.*

Ref.: Pócs 2015 (tax., dist.)

Qld

Colura ornata K.I.Goebel

Ref.: Pócs 2015 (tax., dist.)

Qld

Colura pulcherrima Jovet-Ast

Colura pulcherrima var. **bartlettii** Jovet-Ast

Ref.: Pócs 2015 (tax., dist.)

Tas.

Colura queenslandica B.M.Thiers

Ref.: Pócs 2015 (tax., dist.)

Herbarium voucher: Queensland: Cooloola NP, Poona Lake, 23 Feb. 1983, *I.G. Stone* (BRI AQ0717107).

Qld

Colura saccophylla E.A.Hodgs. & Herzog

Ref.: Pócs 2015 (tax., dist.)

Herbarium voucher: Tasmania: Waratah-Savage River Road, Arthur River catchment, un-named stream, 28 Jan. 2012, *E.A. Brown & M.A.M. Renner 6018* (NSW 909418).

Tas.

Colura simplicior Jovet-Ast

Ref.: Pócs 2015 (tax., dist.)

Qld

Colura streimannii Pócs

Ref.: Pócs 2015 (tax., dist.)

Qld

Conoscyphus Mitt.

Ref.: Dimon et al. 2018 (tax.)

Conoscyphus trapezioides (Sande Lac.) Schiffn.

≡ *Chiloscyphus trapezioides* Sande Lac.

Ref.: Dimon et al. 2018 (tax.)

Herbarium voucher: Queensland: track to North West Peak of Bartle Frere from end of Gourka Road, Wooroonooran National Park, 1 Sep. 2014, *L.J. Gray and M.A.M. Renner 7288* (NSW 880466).

Qld

Cryptolophocolea L.Söderstr., Crand.-Stotl., Stotler & Váňa

Ref.: Söderström et al. 2013a (tax.)

Cryptolophocolea connatifolia (J.J.Engel) L.Söderstr.

≡ *Chiloscyphus connatifolius* J.J.Engel

Ref.: Söderström et al. 2013b (tax.); Engel & Glenny 2019a (dist.)

Herbarium voucher: Tasmania: *J.J. Engel 14648* (HO).

Tas.

Cryptolophocolea edentata (J.J.Engel) L.Söderstr.

≡ *Chiloscyphus edentatus* J.J.Engel

Ref.: Söderström et al. 2013b (tax.); Engel & Glenny 2019a (dist.)

Herbarium voucher: Tasmania: Cradle Mountain Lake St Clair National Park, Marigold Creek, W of and draining into Crater Lake, vicinity of Crater Peak Lookout, 5 Feb. 1977, *J.J. Engel 14109* (HO 571612).

Tas.

Cryptolophocolea helmsiana (Steph.) L.Söderstr.

≡ *Lophocolea helmsiana* Steph.

Chiloscyphus helmsianus (Steph.) J.J.Engel & R.M.Schust.

Ref.: Söderström et al. 2013b (tax.); Engel & Glenny 2019a (dist.)

Herbarium voucher: Tasmania: Mt Pelion East (Mersey sheet 245 660), 2 Oct. 1987, *A. Moscal 14829* (MEL 2064012A).

Vic., Tas.

Cryptolophocolea leucophylla (Hook.f. & Taylor) L.Söderstr.

≡ *Jungermannia leucophylla* Hook.f. & Taylor

Lophocolea leucophylla (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

Chiloscyphus leucophyllus (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

Lophocolea leucophylla (Hook.f. & Taylor) Mitt., *nom. illeg.*

= *Lophocolea verrucosa* Steph.

Chiloscyphus verrucosus (Steph.) J.J.Engel & R.M.Schust.

Ref.: Söderström et al. 2013b (tax.); Engel & Glenny 2019a (dist.)

Herbarium voucher: Tasmania: Mt Arrowsmith, S side; on Lyell Highway, 2.7 mile W of King William Saddle, W of Derwent Bridge, side of Surprise Valley, *R.M. Schuster 50380A* (HO 571717).

Tas.

Cryptolophocolea mitteniana (Colenso) L.Söderstr.

≡ *Isotachis mitteniana* Colenso

Ref.: Söderström et al. 2013b (tax.)

Cryptolophocolea mitteniana var. **obtusa** (J.J.Engel) L.Söderstr.

Ref.: Söderström et al. 2013b (tax.); Engel & Glenny 2019a (dist.)

Herbarium voucher: Macquarie Island: *R. Seppelt 6708* (F).

Macquarie I.

Cryptolophocolea subopposita (J.J.Engel) L.Söderstr.

≡ *Chiloscyphus subopposita* J.J.Engel

Ref.: Söderström et al. 2013b (tax.); Engel & Glenny 2019a (dist.)

Herbarium voucher: Tasmania: foothills of the Sentinel Range, 17 Jan. 2011, *J. Jarman* (HO 559841).

NSW, Vic., Tas.

Cryptolophocolea trialata (Gottsche) L.Söderstr.

≡ *Lophocolea trialata* Gottsche

≡ *Chiloscyphus trialatus* (Gottsche) J.J.Engel & R.M.Schust.

= *Lophocolea bicuspidata* Pearson

Chiloscyphus pearsonii J.J.Engel & R.M.Schust.

= *Lophocolea tasmanica* Mitt.

Chiloscyphus archeri J.J.Engel & R.M.Schust.

Ref.: Söderström et al. 2013b (tax.); Engel & Glenny 2019a (dist.)

Herbarium voucher: New South Wales: Rodriguez Pass, Blackheath, Blue Mountains National Park, 4 Jan. 1911, *W.W. Watts Hepat 1002* (NSW 817908).

NSW, Vic., Tas.

Cryptoplagiochila S.D.F.Patzak, M.A.M.Renner & Heinrichs

Cryptoplagiochila radiculosa (Mitt.) S.D.F.Patzak, M.A.M.Renner & Heinrichs

≡ *Plagiochila radiculosa* Mitt.

= *Plagiochila wattsii* Steph. ex Rodway

Ref: Renner et al 2016b (tax., dist.)

Herbarium voucher: Tasmania: Mt Frankland, 27 Dec. 1990, *A. Moscal* 20721 (HO 301770).

Tas.

Cumulolejeunea R.L.Zhu & L.Shu

Ref.: Zhu & Shu 2018 (tax.)

Cumulolejeunea ocellata (Herzog) R.L.Zhu & L.Shu

≡ *Rectolejeunea ocellata* Herzog

Microlejeunea ocellata (Herzog) Grolle

Ref.: Zhu & Shu 2018 (tax., dist.)

Herbarium voucher: New South Wales: Base of Mount Warning, car park at end of road, 17 Jun. 2005, *M.A.M. Renner 1418* (NSW1004787).

Qld, NSW, Lord Howe I.

Cuspidatula Steph.

Ref.: Feldberg et al. 2010b (tax.)

Cuspidatula monodon (Taylor ex Lehm.) Steph.

≡ *Jungermannia monodon* Taylor ex Lehm.
Jamesoniella monodon (Taylor ex Lehm.) N.Kitag.
= *Jungermannia contracta var. novae-hollandiae* Gottsche ex Nees
= *Jungermannia monodon var. muelleri* Gottsche
= *Jungermannia monodon var. fraseri* Gottsche, *nom. illeg.*
Ref.: Feldberg et al. 2010b (tax.)
Herbarium voucher: Tasmania: Montagu River, 28 Dec. 1990, *A. Moscal 20359* (HO 593431).

Qld, **NSW**, **Vic.**, **Tas.**, **Lord Howe I.**

Cyathodium Kunze ex Lehm.
Ref.: Söderström et al. 2016 (tax.)
Cyathodium cavernarum Kunze ex Lehm.
Ref.: Söderström et al. 2016 (tax.)
Herbarium voucher: Western Australia: Yamara Gap, Napier Range, Kimberley, 30 Aug. 1988, *G.A.M. Scott* (MELU H000785a)

WA, **NT**, **NSW**

Cylindrocolea R.M.Schust.
Ref.: Váňa et al. 2013e (tax.)
Cylindrocolea kiaeri (Austin) Váňa
≡ *Cephaloziella kiaeri* (Austin) Douin
Ref.: Váňa et al. 2013e (tax.)
Herbarium voucher: Queensland: Windsor Tableland, 37 km NW of Mossman, 26 Jun. 1984, *H. Streimann* 29735 (CBG 8407905.1). Australian specimens determined by Jiri Váňa.

Qld

Dendroceros Nees
Dendroceros australis Steph.
Ref.: Söderström et al. 2016 (tax.)
The status of this species requires further investigation.

NSW

Dendroceros crispatus (Hook.) Nees
≡ *Monoclea crispata* Hook.
Ref.: Piippo 1993 (tax.)
Herbarium voucher: Queensland: Main Coast Range. Mount Lewis W of Rumula, SW slope of summit on side of road, 10 Jun. 2001, *D.C. Cargill 130* (CANB 644613.1).

Qld, **NSW**, **Lord Howe I.**

Dendroceros difficilis Steph.
Ref.: Söderström et al. 2016 (tax.); Pócs & Streimann 1999 (dist.)

Qld

Dendroceros granulatus Mitt.
This species has not been seen to confirm identification, so the status of *Dendroceros granulatus* in Australia is unresolved.

?Austr.

Dendroceros muelleri Steph.
Ref.: Söderström et al. 2016 (tax.)
Herbarium voucher: Queensland: Atherton Tablelands; PEI Road, North Johnston River Logging Area, off Glen Allyn Road, 2 Jul. 2005, *D.C. Cargill 844* (CANB 791096.1).

Qld

Dendroceros subtropicus C.J.Wild
Herbarium voucher: Queensland: Tamborine Mtn, *C.J. Wild* (BRI AQ0722116).

The status of this species requires further investigation.

Qld

Dendroceros wattsianus Steph.
Ref.: Söderström et al. 2016 (tax.)
The status of this species requires further investigation.

NSW

Denotarisia Grolle
Ref.: Crandall-Stotler et al. 2009b (tax.)
The Jamesoniellaceae was treated as Adelanthaceae subfam. Jamesonielloideae by Söderström et al. (2016), however the status of this family remains subject to investigation. The relationships of *Denotarisia* have not been established on the basis of published molecular data and its familial or subfamilial placement have not been confirmed.
Denotarisia linguifolia (De Not.) Grolle
≡ *Plagiochila linguifolia* De Not.
Herbarium voucher: Queensland: Thornton Peak, track to summit from Hilda Creek, ridge on summit plateau, Daintree National Park, 16 Aug. 2017, *M.A.M. Renner, A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys 8570* (NSW 1061094).

Qld

Dinckleria Trevis.
Ref.: Crandall-Stotler et al. 2009b (tax.)
Dinckleria pleurata (Hook.f. & Taylor) Trevis.
≡ *Jungermannia pleurata* Hook.f. & Taylor
Ref.: Renner et al. 2016a (tax., dist.)
Herbarium voucher: Queensland: Macpherson Range, in the vicinity of Tooloona Lookout, Lamington National Park, 6 Mar. 2014, *A.E. Orme & M.A.M. Renner 6827* (NSW 870365).

Qld, **NSW Vic.**, **Tas.**

Dinckleria singularis (Schiffn.) M.A.M.Renner, Schäf.-Verw. & Heinrichs
≡ *Plagiochila singularis* Schiffn.
Ref.: Renner et al. 2016a (tax., dist.)
Herbarium voucher: Queensland: South Johnston River, McMillan Creek catchment, Gorrell Track c. 2 km S of South Johnston River picnic area (old forestry camp), Wooroonooran National Park, 6 Apr. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 6570* (NSW 970423).

Qld

Diplasiolejeunea (Spruce) Schiffn.
≡ *Lejeunea* subg. *Diplasiolejeunea* Spruce
Ref.: Söderström et al. 2015 (tax.)
Diplasiolejeunea cavifolia Steph.
Herbarium voucher: Queensland: Start of Bartle Frere walking track, Bellenden Ker Range, 17 km W of Malanda, 16 Dec. 1990, *J.A. Curnow 4070B*, *p.p.* (CANB 811908.1).

Qld

Diplasiolejeunea plicatiloba (Hook.f. & Taylor) Grolle
≡ *Jungermannia plicatiloba* Hook.f. & Taylor
= *Lejeunea lyratifolia* Hook.f. & Taylor
Herbarium voucher: Tasmania: near Pelion Plains, 11 Mar. 1992, *J. Jarman* (HO 525895).

Tas.

Diplophyllum (Dumort.) Dumort., *nom. cons.*

≡ *Jungermannia* sect. *Diplophyllum* Dumort.

Diplophyllum androgynum J.J.Engel & G.L.Merr.

Ref.: Söderström et al. 2016 (tax.); Engel & Smith Merrill 1998 (dist.)

Herbarium voucher: Tasmania: Great Western Tiers, vicinity of Devils Gullet Lookout, above Fisher River and W of Lake Mackenzie, 24 Mar. 1977, *J.J. Engel 15911* (HO 530664).

Tas.

Diplophyllum angustifolium J.J.Engel & G.L.Merr.

Ref.: Söderström et al. 2016 (tax.); Engel & Smith Merrill 1998 (dist.)

Herbarium voucher: Tasmania: North East Tramway (abandoned), W of Williamsford and SW of Rosebery, 8 Apr. 1977, *J.J. Engel 16508* (NSW 609537).

Tas.

Diplophyllum dioicum R.M.Schust.

Ref.: Söderström et al. 2016 (tax.); Engel & Smith Merrill 1998 (dist.)

Herbarium voucher: Tasmania: Cradle Mountain, steep NE-facing slope immediately below summit, 3 Feb. 1977, *J.J. Engel 13930* (HO 530652).

Tas.

Diplophyllum incrassatum J.J.Engel & G.L.Merr.

Ref.: Söderström et al. 2016 (tax.); Engel & Smith Merrill 1998 (dist.)

Herbarium voucher: Tasmania: *J.J. Engel 14888* (isotype: HO).

Tas.

Diplophyllum obtusifolium (Hook.) Dumort.

≡ *Jungermannia obtusifolia* Hook.

Ref.: Söderström et al. 2016 (tax.)

Diplophyllum obtusifolium subsp. **domesticum** (Gottsche) Váňa

≡ *Jungermannia domestica* Gottsche

Diplophyllum domesticum (Gottsche) Steph.

= *Diplophyllum marionense* S.W.Arnell

Ref.: Söderström et al. 2016 (tax.); Engel & Smith Merrill 1998 (dist.)

Herbarium voucher: Victoria: Mt Buffalo National Park, Dicksons Falls, ENE of The Horn (Mt Buffalo), 20 miles [32 km] W of Bright, 4 May 1977, *J.J. Engel* 17075 (CANB 769765.1).

NSW, **ACT**, **Vic.**, **Tas.**

Diplophyllum verrucosum R.M.Schust.

Ref.: Söderström et al. 2016 (tax.); Engel & Smith Merrill 1998 (dist.)

Herbarium voucher: Tasmania: Cradle Mountain, steep NE-facing slope immediately below summit, 3 Feb. 1977, *J.J. Engel 13929* (HO 530662).

NSW, **Vic.**, **Tas.**

Drepanolejeunea (Spruce) Steph.

≡ *Lejeunea* subg. *Drepanolejeunea* Spruce

Ref.: Söderström et al. 2015 (tax.)

Drepanolejeunea aucklandica Steph.

Herbarium voucher: Tasmania: Manuka Road, logging coupe WR008H, 11 Nov. 1998, *J. Jarman* (HO 579707).

Tas.

Drepanolejeunea dactylophora (Gottsche, Lindenb. & Nees) J.B.Jack & Steph.

≡ *Lejeunea dactylophora* Gottsche, Lindenb. & Nees

Herbarium voucher: Queensland: Thornton Peak, track to summit from Hilda Creek, on summit plateau, Daintree National Park, 17 Aug. 2017, *M.A.M. Renner, A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys 8580* (NSW1061103).

Qld

Drepanolejeunea grossidens Steph.

Ref.: Grolle 1982 (tax.)

Norfolk I.

Drepanolejeunea hampeana Steph.

Ref.: Thiers 1990 (dist.)

Reported as occurring in tropical montane forests of the central peak of Bellenden Ker by Thiers (1990) but without citation of supporting voucher, which is presumably deposited in NY as no digitised material of this species is held by Australasian herbaria. We accept *Drepanolejeunea hampeana* as present in Australia on the strength of Thiers (1990) published statements, but caution that this record requires verification.

Qld

Drepanolejeunea intermedia Zwickel

Herbarium voucher: Queensland: Big Tableland, 26 km S of Cooktown, 4 Jul. 1984, *H. Streimann 30764*, *p.p.* (CBG 9608618.1).

Qld

Drepanolejeunea levicornua Steph.

The occurrence of *Drepanolejeunea levicornua* in Australia needs to be confirmed.

?Austr.

Drepanolejeunea longicornua (Herzog) Mizut.

≡ *Drepanolejeunea levicornua* var. *longicornua* Herzog

Ref.: Pócs & Streimann 1999 (dist.)

Herbarium voucher: Queensland: Start of Bartle Frere walking track, Bellenden Ker Range, 17 km W of Malanda, 16 Dec. 1990, *J.A. Curnow 4070B*, *p.p.* (CANB 811909.1).

Pócs & Streimann (1999) conferred voucher specimens to *Drepanolejeunea longicornua*. While their determination was qualified in this manner, we include *Drepanolejeunea longicornua* in this catalogue in the absence of any alternative or improved determination.

Qld

Drepanolejeunea obliqua Steph.

Drepanolejeunea obliqua was included by McCarthy (2003) based on the list of Queensland flora compiled by Bolin & Henderson (2002). We have located no voucher material to support the presence of *Drepanolejeunea obliqua* in Australia but have not completed an exhaustive search, so regard the status of this species in Australia as unresolved.

?Austr.

Drepanolejeunea pentadactyla (Mont.) Steph.

≡ *Lejeunea pentadactyla* Mont.

= *Drepanolejeunea micholitzii* Steph.

= *Drepanolejeunea micholitzii* var. *genuina* Herzog, *nom. inval.*

Herbarium voucher: Queensland: Bellenden Ker Range, Russell River catchment, track to Choorichillum from end of Gourka Road, between NW summit and Choorichillum, Wooroonooran

National Park, 30 Mar. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 6422* (NSW 896961).

Qld

Drepanolejeunea serricalyx Herzog

Ref.: Meagher et al. 2023 (tax., dist.)

Herbarium voucher: Queensland: Paluma Range, Paluma, elev. 895 m, private garden, epiphyll on leaf of rainforest tree, 6 April 2020, *A.Cairns WT-1204* (BRI AQ1045140).

Qld

Drepanolejeunea tenera K.I.Goebel

Ref.: Pócs & Streimann 1999 (dist.)

Qld

Drepanolejeunea tenuis (Nees) J.B.Jack & Steph.

≡ *Jungermannia cucullata var. tenuis* Nees

Lejeunea tenuis (Nees) Nees

Jungermannia tenuis Reinw., Blume & Nees, *nom. illeg.*

Herbarium voucher: Queensland: Mount Finnegan, 7 Sep. 1948, *L.J. Brass 20144* (MEL 1037767B).

Drepanolejeunea tenuis was listed in synonymy of *Drepanolejeunea angustifolia* by Mizutani (1963), the latter being rejected from Australia in McCarthy (2003) without comment. *Drepanolejeunea tenuis* was also included as an accepted species by McCarthy (2003) based on the compilatory listing of Queensland flora by Bolin & Henderson (2002), it is possible that Mizutani's (1963) synonymy was overlooked by both. The status of *Drepanolejeunea tenuis* in Australia requires further investigation.

Qld

Drepanolejeunea ternatensis (Gottsche) Steph. ex Schiffn.

≡ *Lejeunea ternatensis* Gottsche

Ref.: Grolle 1982 (tax., dist.)

Drepanolejeunea ternatensis var. **lancispina** Herzog

Ref.: Grolle 1982 (tax., dist.)

Norfolk I.

Drepanolejeunea ternatensis var. **ternatensis**

Ref.: Grolle 1982 (tax., dist.)

Herbarium voucher: Queensland: Bellenden Ker National Park, summit of central peak of Mt Bellenden Ker, vicinity of Telecom transmitting station, 10 Jul. 1984, *B.M. Thiers 2458* (CBG 9909471.1).

Qld, **NSW**

Drepanolejeunea tricornua Herzog

Ref.: Meagher et al. 2023 (tax., dist.)

Herbarium voucher: Queensland: Paluma Range, Paluma, elev. 895 m, private garden, epiphyll on leaf of rainforest tree, 6 April 2020, *A.Cairns WT-1202A* (BRI AQ1045137).

Qld

Drepanolejeunea vesiculosa (Mitt.) Steph.

≡ *Lejeunea vesiculosa* Mitt.

Ref.: Grolle 1982 (tax., dist.)

Herbarium voucher: Queensland: Fraser Island. In the deep Wongoolba Creek N of the Central Station, Great Sandy National Park, 17 Aug. 1999, *T. Pócs & H. Streimann 9963/B* (NSW895570).

Qld, **Norfolk I.**

Drucella E.A.Hodgs.

Drucella integristipula (Steph.) E.A.Hodgs.

≡ *Lepidozia integristipula* Steph.

Ref.: Söderström et al. 2016 (tax.)

Herbarium voucher: New South Wales: 1.5 km N of O'Sullivans Gap, O'Sullivans Gap Flora Reserve, 31 Mar. 2005, *E.A. Brown, P.C. Jobson & D.A. Meagher 2005/07* (NSW 715278).

Qld, **NSW**, **Tas.**, **Vic.**

Dumortiera Nees

Ref.: Söderström et al. 2016 (tax.)

Dumortiera hirsuta (Schwägr.) Nees

≡ *Marchantia hirsuta* Schwägr.

Ref.: Söderström et al. 2016 (tax.)

Herbarium voucher: Queensland: [Crater Lakes] National Park, Lake Eacham. Wrights Creek, on Wrights Creek road, at edge of creek, 6 Jul. 2005, *D.C. Cargill 886* (CANB 898987.1).

Qld, **Norfolk I.**

Enigmella G.A.M.Scott & K.G.Beckm.

Ref.: Beckmann & Scott 1992 (tax.)

Enigmella thallina G.A.M.Scott & K.G.Beckm.

Ref.: Beckmann & Scott 1992 (tax., dist.)

Herbarium voucher: Western Australia: On the Borden - Stirling Range section of Chester Pass Road, 25 Aug. 1987, *K.G. Beckman* (PERTH 5915465).

WA, **SA**, **Qld**, **NSW**, **Vic.**

Eoisotachis R.M.Schust.

Ref.: Crandall-Stotler et al. 2009b (tax.)

Eoisotachis nigella (Herzog) R.M.Schust.

≡ *Isotachis nigella* Herzog

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: Hartz Mountains, Waratah Lookout, 4 Dec. 1988, *A.J. Downing 10* (HO 119129).

Tas.

Eotrichocolea R.M.Schust.

Ref.: Engel & Glenny 2008 (tax.)

Eotrichocolea polyacantha (Hook.f. & Taylor) R.M.Schust.

≡ *Jungermannia polyacantha* Hook.f. & Taylor

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Anthony Road, western Tasmania, 9 May 1991, *J. Jarman* (HO 547785).

Tas.

Folioceros D.C.Bhardwaj

Folioceros fuciformis (Mont.) D.C.Bhardwaj

≡ *Anthoceros fuciformis* Mont.

Herbarium voucher: Queensland: Topaz Road, 20 km by road S of Malanda. Tall, S-facing roadbank opposite Topaz National Park, 6 Aug. 2006, *J.A. Curnow 6844A* (CANB 899802.1).

Qld

Folioceros glandulosus (Lehm. & Lindenb.) D.C.Bhardwaj

≡ *Anthoceros glandulosus* Lehm. & Lindenb.

The identity of *Folioceros glandulosus* is uncertain. No other *Folioceros* has been found in Australia apart from *F. fuciformis*.

Qld

Fossombronia Raddi

= *Austrofossombronia* R.M.Schust.

Fossombronia alata G.A.M.Scott & D.C.Pike

Ref.: Scott & Pike 1984 (tax.)

Herbarium voucher: Victoria: State Forest; heath swamp, off Reed Bed Road, 9 Oct. 2003, *D.C. Cargill 540* (CANB 790970.1).

WA, Vic.

Fossombronia altilamellosa G.A.M.Scott & D.C.Pike ex Cargill

= *Fossombronia altilamellosa* G.A.M.Scott & D.C.Pike, *nom. inval.*

Ref.: McCarthy 2003 (tax.); Scott & Pike 1987 (dist.)

Herbarium voucher: Australian Capital Territory: CSIRO, Black Mountain site, S side of Crop Adaptation Building no.73, 26 Sep. 2003, *J.A. Curnow 6072* (CANB 671995.1).

WA, **SA**, **NSW**, **Vic.**, **Tas.**

Fossombronia areolata G.A.M.Scott & D.C.Pike

Ref.: McCarthy 2003 (tax.); Scott & Pike 1987 (dist.)

Herbarium voucher: Victoria: Lodge Road, Grampians, 16 Sep. 1981, *D.C. Pike & A.E. Pike s.n.* (MUCV 4617).

SA, Vic.

Fossombronia auricolor G.A.M.Scott & D.C.Pike ex Cargill

= *Fossombronia auricolor* G.A.M.Scott & D.C.Pike, *nom. inval.*

Ref.: McCarthy 2003 (tax.); Scott & Pike 1987 (dist.)

Herbarium voucher: South Australia: Wilpena Pound, 26 Aug. 1984, *B.A. Fuhrer, D.C. Pike & G.A.M. Scott s.n.* (MUCV 5446).

SA, Vic

Fossombronia australis Mitt.

≡ *Austrofossombronia australis* (Mitt.) R.M.Schust.

= *Fossombronia naumannii* Schiffn.

Ref.: McCarthy 2003 (tax., dist.)

Herbarium voucher: New South Wales: Kosciuszko National Park, Thredbo River Track from Thredbo Village to Dead Horse Gap, 12 Jan. 2002, *J.A. Curnow 5608* (CANB 636785.1).

NSW, **ACT**, **Vic.**, **Tas, Macquarie I.**

Fossombronia bracchia Cargill

Ref. Cargill 2023 (tax., dist.)

Herbarium voucher: Western Australia: Lesueur National Park, Banovich Rd, 5 Aug. 2022, *D.C. Cargill, J. Milne, H. Innes & K. Syme 1813A* (CANB 954795).

WA

Fossombronia caespitiformis De Not. ex Rabenh.

Fossombronia caespitiformis subsp. **caespitiformis**

Herbarium voucher: New South Wales: Bournda, Red Hill Road: Manna Park, ecolodge, 6 Sep. 2012, *D.C. Cargill 1352* (CANB 811483.1).

WA, **SA**, **Qld**, **NSW**, **Vic.**

Fossombronia cerebriformis G.A.M.Scott & D.C.Pike

Ref.: Scott & Pike 1984 (tax.)

Herbarium voucher: Victoria: Golton's Gorge, Grampians, 24 Aug. 1982, *B.A. Fuhrer, D.C. Pike & G.A.M. Scott s.n.* (MUCV 4916).

WA, SA, **Vic.**

Fossombronia cultriformis G.A.M.Scott & D.C.Pike

Ref.: McCarthy 2003 (tax.)

Herbarium voucher: New South Wales: 22.5 km N of Dubbo on the Gilgandra Road, 0.5 km N of Collie Road, 23 Sep. 2010, *P. Wellman 595A.1* (CANB 896000.1).

WA, **SA**, **NSW**, **ACT, Vic.**

Fossombronia densa G.A.M.Scott & D.C.Pike

Ref.: McCarthy 2003 (tax.); Scott & Pike 1987 (dist.)

Herbarium voucher: Victoria: State Forest, Rushworth, 5 Sep. 1974, *B.A. Fuhrer s.n.* (MUCV 2455).

WA, **SA**, **NSW, Vic.**

Fossombronia dentata Steph.

Fossobronia dentata has not been evaluated fully. Scott & Pike guessed at its possible identity based on loose spores associated with the type, being of *F. pusilla* type, but Stephani's description of the leaves does not match *Fossombronia pusilla*. Hodgson placed this taxon into synonymy under *Goebelobryum unguiculatum* but made no mention of having seen the type herself only that Stephani's description of *F. dentata* sounded like *Goebelobryum*.

Tas.

Fossombronia fuhreri G.A.M.Scott & D.C.Pike

Ref.: McCarthy 2003 (tax.); Scott & Pike 1987 (dist.)

Herbarium voucher: Victoria: Yellow Rock, Nelson Bay, 27 Aug. 2002, *D.C. Cargill 343* (CANB 654132.1).

Vic.

Fossombronia grossepapillata Steph.

Ref.: Scott & Pike 1988 (tax.)

The status of this species requires further investigation.

NSW

Fossombronia hewsoniae G.A.M.Scott & D.C.Pike

Ref.: McCarthy 2003 (tax.); Scott & Pike 1987 (dist.)

Herbarium voucher: Western Australia: Dandaragan Road, W of Moora, 22 Aug 1984, *H.J. Hewson s.n.* (MEL 0255975A).

WA

Fossombronia integrifolia Steph.

The status of this species requires further investigation.

NSW

Fossombronia intestinalis Taylor

Ref.: Scott & Pike 1988 (tax.); Scott 1985 (dist.)

Herbarium voucher: Western Australia: Manjimup, Old Cemetery, 1.5 km S of town centre along South Western Highway, 3 Sep. 2009, *D.C. Cargill 1238WA* (CANB 900899.1).

WA, **SA**, **NSW**, **ACT**, **Vic**, **Tas.**

Fossombronia laciniata G.A.M.Scott & D.C.Pike

Ref.: McCarthy 2003 (tax.); Scott & Pike 1987 (dist.)

Known only from the type locality.

Herbarium voucher: South Australia: The Coorong, 30 Aug 1984, *B.A. Fuhrer, D.C. Pike & G.A.M. Scott s.n.* (MELU H107619a)

SA

Fossombronia magnaspora G.A.M.Scott & D.C.Pike ex Cargill

= *Fossombronia magnaspora* G.A.M.Scott & D.C.Pike, *nom. inval.*

Ref.: McCarthy 2003 (tax.); Scott & Pike 1987 (dist.)

Herbarium voucher: Victoria: Glenelg Forest, 10 June 1984, *B.A. Fuhrer, D.C. Pike & G.A.M. Scott s.n.* (MUCV 7320).

WA, **ACT**, **Vic.**

Fossombronia maritima (Paton) Paton

≡ *Fossombronia pusilla var. maritima* Paton

Herbarium voucher: Australian Capital Territory: Tidbinbilla Nature Reserve, Ashbrook Trail toward carpark for Hanging Rock Walk, 20 Feb 2011, *R.W. Purdie 8100* (CANB 799379.1)

WA, **NSW**, **ACT**, **Vic.**

Fossombronia microlamellata G.A.M.Scott & D.C.Pike

Ref.: Scott & Pike 1984 (tax., dist.)

Herbarium voucher: New South Wales: Milo Road, Monga State Forest, 24.5 km SE of Braidwood, 5 Feb. 1986, *H. Streimann 36338* (CANB 790763.1).

SA, **Vic.**

Fossombronia papillata Steph.

Herbarium voucher: Queensland: Silver Valley Road, 4.4 km by road SW of Herberton, 9 Aug. 2006, *J.A. Curnow 6874/2* (CANB 898908.1).

NT, **Qld**, **NSW**

Fossombronia pseudointestinalis Cargill

Herbarium voucher: New South Wales: Bendick Murrell National Park, north of Young, along Annandale Trail, 19 Jul. 2020, *R.W. Purdie 12052* (CANB 918520.1).

NSW

Fossombronia punctata G.A.M.Scott & D.C.Pike

Ref.: McCarthy 2003 (tax.); Scott & Pike 1984 (dist.)

Herbarium voucher: South Australia: Quorn Native Flora Reserve, Southern Flinders Ranges, 21 Aug 2016, *D.C. Cargill 1315SA.B* (CANB 900970.1).

WA, **SA**, **NSW**, **Vic.**

Fossombronia purpureospora G.A.M.Scott & D.C.Pike ex Cargill

= *Fossombronia purpureospora* G.A.M.Scott & D.C.Pike, *nom. inval.*

Ref.: McCarthy 2003 (tax.); Scott & Pike 1984 (dist.)

Herbarium voucher: Victoria: Lower Glenelg National Park, Moleside Creek Picnic Area, 11 Oct 2006, *D.C. Cargill 2020* (CANB 923326)

SA, **Vic.**

Fossombronia pusilla (L.) Nees

≡ *Jungermannia pusilla* L.

= *Fossombronia perpusilla* (Colenso) Steph.

Herbarium voucher: South Australia: Mount Remarkable National Park. Alligator Lodge, Southern Flinders Ranges, 22 Aug. 2016, *D.C. Cargill 1325SA* (CANB 900980.1).

WA, **SA**, **Qld**, **NSW**, **ACT**, **Vic.**, **Tas.**

Fossombronia ruminata Cargill

≡ *Fossombronia maritima* G.A.M.Scott & D.C.Pike, *nom. inval.*

= *Fossombronia* sp. Nelson Bay (B.Fuhrer & D.C.Pike s.n., 15 Sept. 1984) Cargill

Ref.: Cargill et al. 2012 (dist.)

Herbarium voucher: Victoria: Nelson Bay, Yellow Rock, 27 Aug 2002, *D.C. Cargill342* (CANB 654131.1)

Also recorded recently (November 2023) from Western Australia, but we have not had the opportunity to verify specimens from that state.

SA, **NSW**, **Vic.**

Fossombronia rupestris G.A.M.Scott & D.C.Pike ex Cargill

= *Fossombronia rupestris* G.A.M.Scott & D.C.Pike, *nom. inval.*

Ref.: Scott & Pike 1987 (dist.)

Herbarium voucher: South Australia: Rim of Wilpena Pound, 26 Aug 1984, *D.C. Pike, B.A. Fuhrer & G.A.M. Scott s.n.* (MEL 0255981A).

SA

Fossombronia scrobiculata G.A.M.Scott & D.C.Pike

Ref.: Scott & Pike 1984 (tax., dist.)

Herbarium voucher: Victoria: Melville Lookout Rd. Rushworth State Forest, 23 Aug 1985, *D.C. Pike, B.A. Fuhrer, G.A.M. Scott & J. Day s.n.* (MELU H107677a).

WA, **SA**, **Vic.**

Fossombronia subsaccata Steph**.**

The status of this species requires further investigation.

Aust.

Fossombronia tesselata G.A.M.Scott & D.C.Pike

Ref.: Scott & Pike 1987 (tax., dist.)

Herbarium voucher: Victoria: Victoria Valley Rd, near Serra Rd junction, 31 Aug. 1985, *B.A. Fuhrer & D.C. Pike s.n.* (MEL 0255982A).

Vic.

Fossombronia truncata G.A.M.Scott & D.C.Pike ex Cargill

= *Fossombronia truncata* G.A.M.Scott & D.C.Pike, *nom. inval.*

Ref.: Scott & Pike 1987 (dist.)

Herbarium voucher: Western Australia: Cordalup Road National Park, 1 Sep. 2004, *D.C. Cargill 1512* (CANB 900764.1).

WA, **SA**, **Vic.**

Fossombronia vermiculata G.A.M.Scott & D.C.Pike

Ref.: Scott & Pike 1987 (tax.); Scott & Pike 1984 (dist.)

Herbarium voucher: Victoria: Bealiba, W. of Bendigo, 28 July 1971, *G.A.M. Scott s.n.* (MELU H108322a)

WA, SA, NSW, ACT, Vic.

Fossombronia wattsii Steph.

Ref.: Söderström et al. 2016 (tax.)

Herbarium voucher: Australian Capital Territory: Namadgi National Park Visitor's Centre, at the back of the centre, 27 Nov. 2018, *D.C. Cargill 1577* (CANB 909602.1).

WA, **NSW**, **ACT**, **Vic.**

Fossombronia wondraczekii (Corda) Dumort. ex Lindb.

≡ *Jungermannia wondraczekii* Corda

= *Fossombronia forsythii* Steph.

Herbarium voucher: Australian Capital Territory: Australian National Botanic Gardens, in garden bed, sect. 33, 11 Apr. 2001, *D.C. Cargill 2* (CANB 629101).

WA, **SA**, **NSW**, **Vic.**

Frullania Raddi

Ref.: Crandall-Stotler et al. 2009b (tax.)

Frullania allanii E.A.Hodgs.

Ref.: Hattori 1979b (dist.)

Herbarium voucher: New South Wales: Hyland State Forest, Hyland Road, Head of Perrotts Creek, 30 km NW of Dorrigo, 14 Oct. 1978, *H. Streimann 6689* (CANB 7905385.1).

Qld, **NSW**

Frullania alternans Nees

Frullania alternans is a poorly known taxon described from Norfolk Island that has not been investigated recently. The taxonomic status of this species requires further investigation.

Norfolk I.

Frullania apiculata (Reinw., Blume & Nees) Dumort.

≡ *Jungermannia apiculata* Reinw., Blume & Nees

= *Frullania apiculata var. parva* S.Hatt.

Ref.: Hattori 1987a (tax., dist.)

Herbarium voucher: Queensland: Devils Thumb, W of Mossman, 9 Oct. 1982, *M.L. Hicks 11287* (BRI AQ0717108).

Qld

Frullania aterrima (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees

= *Frullania weymouthiana* Steph.

≡ *Jungermannia aterrima* Hook.f. & Taylor

Ref.: Hattori 1983 (tax., dist.)

Herbarium voucher: Tasmania: Manuka Road, logging coupe WR001B, 18 Nov. 1997, *J. Jarman* (HO 579758).

Also reported for Queensland by Hattori (1988).

NSW, Vic., Tas.

Frullania baileyana Steph.

Ref.: Hattori 1979b (tax., dist.)

Herbarium voucher: New South Wales: Kangarooby State Forest, 16 km S of Gooloogong, 10 Sep. 1980, *H. Streimann 10390* (CBG 8006451.1).

Qld, NSW

Frullania belmorensis Steph.

Ref.: Hattori 1979b (tax., dist.)

Herbarium voucher: New South Wales: Head of Hyland Creek, Hyland State Forest, 22 km NW of Dorrigo, 16 Oct. 1978, *H. Streimann 6937* (CBG 7905759.1).

Qld, NSW

Frullania cataractarum Steph.

Ref.: Hattori 1979b (tax., dist.)

Herbarium voucher: Queensland: Mt Stuart, 10 km SSW of Townsville, 9 Jul. 1984, *H. Streimann 31281* (CBG 9908980.1).

Qld, NSW, Vic.

Frullania clavata (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

≡ *Jungermannia clavata* Hook.f. & Taylor

= *Frullania cinnamomea* Carrington & Pearson

Ref.: Hattori 1979a (tax., dist.)

Herbarium voucher: New South Wales: Vandenbergh Road, 4 km E of Robertson, off Jamberoo Road, 17 Sep. 1980, *H. Streimann 10485* (CBG 8006787.1).

WA, NT, Qld, NSW, Vic., Tas.

Frullania crassitexta Steph.

Ref.: Hattori 1979a (tax., dist.)

Accepted as distinct by Hattori (1979a) based on the type material alone, and evidently not known by any further specimens.

Qld

Frullania crawfordii Steph.

Herbarium voucher: New South Wales: Near Johnson's Farm, Jul. 1911, *W.W. Watts LHI Hepat 14* (NSW 818144).

This species has not been evaluated recently. It was excluded from Lord Howe Island by Hattori (1987b).

NSW

Frullania crispata Steph.

Ref.: Hattori 1979a (tax., dist.)

Herbarium voucher: Norfolk Island: Australia orientalis insula Norfolk [Norfolk Island], 1884, *I. Robinson* (MEL 0061532A).

Frullania crispata was listed as a synonym of *Frullania obscura* var. *obscura* by Yuzawa (1991). However, given the fact that the original material of *Jungermannia obscura* (the basionym of *Frullania obscura*) is mixed, and recent changes in the application of the name *Frullania obscura* that result (Gradstein 2012), we prefer, in lieu of this reinterpretation of *Jungermannia obscura*, to follow Hattori (1979a) in accepting *Frullania crispata* for Norfolk Island until a critical comparison among types occur .

Norfolk I.

Frullania deplanata Mitt.

= *Frullania grayana* Steph., *nom. illeg.*

Ref.: Hattori 1983 (tax., dist.)

Herbarium voucher: Victoria: Bonang River, 59 km NE of Orbost, 4 Apr. 1980, *H. Streimann 10037* (CBG 8002711.1).

Vic., Tas.

Frullania ericoides (Nees) Mont.

≡ *Jungermannia ericoides* Nees

= *Jungermannia squarrosa* Reinw., Blume & Nees, *nom. illeg.*

Ref.: Hattori 1988 (tax.)

Herbarium voucher: Queensland: Hopewell Creek, 40 km NE of Greenvale (Map ref.: 7960, 153.235), 14 Jun. 1993, *R.J. Fensham 237* (CBG 9314836.1).

WA, NT, Qld, NSW, Lord Howe I.

Frullania exigua Steph.

We have been unable to confirm the presence of this African species in Australia. *Frullania exigua* was listed as a synonym of *Frullania obscurifolia* by Demaret & Vanden Berghen (1947).

?Austr.

Frullania falciloba Taylor ex Lehm.

≡ *Jungermannia falciloba* (Taylor ex Lehm.) Hook.f. & Taylor

= *Frullania mooreana* Steph.

= *Frullania asperifolia* Steph.

= *Frullania binominata* Steph.

= *Frullania excisula* Steph.

= *Frullania forsythiana* Steph.

= *Frullania knightiana* Steph.

= *Frullania wattsiana* Steph.

Ref.: Hattori 1979a (tax.); Hattori 1987b (dist.)

Herbarium voucher: New South Wales: Wilsons Creek Road, Mt Boss State Forest, 37 km NNW of Wauchope, 20 Oct. 1978, *H. Streimann 7081* (CBG 7906019.1).

WA, NT, Qld, NSW, ACT, Vic., Tas., Lord Howe I.

Frullania ferdinandi-muelleri Steph.

Ref.: Hattori 1979a (tax., dist.)

Herbarium voucher: New South Wales: Higgins Creek, 19 km NE of Batemans Bay, 9 Aug. 1978, *H. Streimann 5738* (CBG 7810509.1).

Qld, NSW

Frullania flexuosa S.Hatt.

Ref.: Hattori 1983 (tax., dist.)

Accepted as distinct by Hattori (1983) based on two gatherings.

Qld

Frullania fugax (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

≡ *Jungermannia fugax* Hook.f. & Taylor

Ref.: Hattori 1983 (tax., dist.)

Herbarium voucher: New South Wales: Butmaroo Range, 16 km SE of Bungendore, Grid ref: 8827/325834, 15 Nov. 1968, *L.G. Adams 2356* (CANB 182344.1).

Qld, NSW

Frullania fulfordiae S.Hatt.

Ref.: Hattori 1987b (tax., dist.)

Herbarium voucher: (holotype NICH).

NSW, **Lord Howe I.**

Frullania gracillima Steph.

No specimens supporting Australian occurrence of *Frullania gracillima* have been located. *Frullania gracillima* was listed by McCarthy (2003) as occurring in New South Wales, but no literature supporting this distribution was provided. The taxonomic status and Australian occurrences of this species both require further investigation.

?Austr.

Frullania hamaticoma Steph.

Ref.: Hattori 1979a (tax., dist.)

Described on the basis of a single specimen.

Vic.

Frullania hattorii Konrat & Braggins

Ref.: von Konrat & Braggins 2003 (tax., dist.)

Herbarium voucher: Tasmania: Mt. Field Nat. Park, 25 Nov. 1978, *A.V. Ratkowsky H957* (CBG 8205244.1).

Tas.

Frullania hicksiae S.Hatt.

Ref.: Hattori 1984 (tax.)

Frullania hicksiae f. **hicksiae**

Ref.: Hattori 1988 (tax.); Hattori 1984 (dist.)

Herbarium voucher: Queensland: Tully Falls Road, 8 km SE of Ravenshoe, 29 Jun. 1984, *H. Streimann 30107* (CBG 8408462.1).

NT, **Qld**

Frullania hicksiae f. **litoralis** S.Hatt.

Ref.: Hattori 1988 (tax., dist.)

Qld

Frullania howeana Steph.

Ref.: Hattori 1987b (tax., dist.)

Herbarium voucher: New South Wales: Lord Howe Island: Mount Gower, northern reaches of summit, on upper slopes, 10 Jun. 2000, *E.A. Brown & A.J. Leishman 2000/38* (NSW 444731).

Lord Howe I.

Frullania hypoleuca Nees

= *Frullania australis* Steph.

Ref.: von Konrat & Braggins 2001 (tax., dist.)

Herbarium voucher: Queensland: Girringun national park, above Wallaman Falls, 17 Jun. 2001, *E.A. Brown, A. Cairns, C. Cargill, S. Pocs & T. Pocs 1106/L* (BRI AQ0834568).

Qld, **NSW**

Frullania incumbens Mitt.

Ref.: von Konrat & Braggins 2001 (tax., dist.)

Herbarium voucher: Australian Capital Territory: Kangaroo Flats, Tidbinbilla Range, Cotter River District, 27 Nov. 1966, *L.G. Adams 1637* (CANB 165088.1).

NSW, **ACT**, **Tas.**

Frullania johnsonii Steph.

= *Frullania hasskarliana* var. *queenslandica* S.Hatt.

Ref.: Hattori 1987a (tax., dist.)

Qld

Frullania klotzschii Nees ex Steph.

Source location of type gathering is unknown. *Frullania klotzschii* is a poorly known entity requiring further investigation.

?Austr.

Frullania latogaleata Herzog

Herbarium voucher: Western Australia: Hayward Park, Porongurup Range, Aug. 1968, *G.G. Smith* (PERTH 5940680).

WA

Frullania meyeniana Lindenb.

Herbarium voucher: Queensland: Blue Water Creek, Old Mill Road, 39 km WSW of Ingham, 19 Jun. 1984, *H. Streimann 28433* (CBG 8406243.1).

Qld

Frullania monocera (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

≡ *Jungermannia monocera* Hook.f. & Taylor

Ref.: Hattori 1979a (tax.)

Frullania monocera var. **depauperata** S.Hatt.

= *Frullania hampeana* Nees

Ref.: Hattori 1988 (tax., dist.)

Qld

Frullania monocera var. **monocera**

= *Frullania grossiloba* Steph.

Ref.: Hattori 1979a (dist.)

Herbarium voucher: Queensland: Baroon Pocket, 13 Aug. 1983, *J. Windolf 50* (BRI AQ0722363).

NT, **Qld**, **NSW**, **ACT**, **Vic.**, **Tas.**

Frullania monocera var. **subhampeana** (E.A.Hodgs.) Hentschel & von Konrat

≡ *Frullania subhampeana* E.A.Hodgs.

Ref.: Hentschel et al. 2015 (tax.)

Herbarium voucher: New South Wales: Clouds Creek State Forest, Armidale-Grafton road, 23 km NNW of Dorrigo, 16 Oct. 1978, *H. Streimann 6807* (CBG 7905553.1).

This taxon, as *Frullania subhampeana* was accepted and reported for Australia by Hattori (1983, 1988).

Qld, **NSW**

Frullania multilacera Steph.

Ref.: Hattori 1987a (tax.)

Frullania multilacera subsp. **gracilior** S.Hatt.

Ref.: Hattori 1987a (tax., dist.)

Herbarium voucher: Queensland: Mt Leswell, 32 km S of Cooktown, 5 Jul. 1984, *H. Streimann 30971* (CBG 9908992.1).

Qld

Frullania multilaceroides S.Hatt.

Ref.: Hattori 1987a (tax., dist.)

Qld

Frullania neosheana S.Hatt.

Ref.: Hattori 1979a (dist.)

Herbarium voucher: Queensland: Atherton Tablelands, the Crater National Park, 35 km S of Atherton, 1200 m, on rotten log, 25 June 1975, *Garry Shea 6936* (type: NICH; dupl. in herb. G. Shea).

Accepted as distinct by Hattori (1979a) based on a single gathering.

Qld

Frullania nodulosa (Reinw., Blume & Nees) Nees

≡ *Jungermannia nodulosa* Reinw., Blume & Nees

Ref.: Hattori 1980 (tax., dist.)

Herbarium voucher: Queensland: McIlwraith Range; upper reaches of Chester River, toward Double Hill, 31 Jul. 1978, *G. Butler 509* (CBG 7806427.1).

Hattori (1988) neglected his own earlier report of *Frullania nodulosa* from Queensland.

Qld

Frullania pallidula S.Hatt.

Ref.: Hattori 1988 (tax., dist.)

Herbarium voucher: Queensland: Darling Downs, without date, *H. Lau* (MEL 0061622A).

Qld

Frullania pauciramea Steph.

Frullania pauciramea var. **pauciramea**

Ref.: Hattori & Streimann 1985 (tax.)

Herbarium voucher: Queensland: Hugh Nelson Range, Long-lands Gap State Forest, 9 Jun. 2001, *E.A. Brown, A. Cairns, C. Cargill, S. Pocs & T. Pocs 1079/B* (BRI AQ0834270).

Listed in Bolin and Henderson (2002), and recently confirmed for Australia.

Qld

Frullania pentapleura Taylor

= *Frullania wildii* Steph.

Ref.: von Konrat & Braggins 2001 (tax., dist.)

Herbarium voucher: Australian Capital Territory: Black Mountain, 5 km NW of Canberra, 15 Jun. 1980, *H. Streimann 10318* (CBG 8004529.1).

WA, **SA**, **NT**, **Qld**, **NSW**, **ACT**, **Vic.**, **Tas.**

Frullania probosciphora Taylor

= *Frullania maccreana* F.Muell. ex Steph.

= *Frullania reptans* Mitt.

= *Frullania falsa* Steph.

Frullania pentapleura subsp. falsa (Steph.) S.Hatt.

= *Frullania maccrantica* Gottsche

Ref.: Hattori 1979b (tax., dist.)

Herbarium voucher: Victoria: Buninyong Mountains [=Mount Buninyong], 1898, *R.A. Bastow* (MEL 0061756A).

WA, **SA**, **NT**, **Qld**, **NSW**, **ACT**, **Vic.**, **Tas.**, **Lord Howe I.**

Frullania pycnantha (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

≡ *Jungermannia pycnantha* Hook.f. & Taylor

Ref.: Hattori 1983 (tax.)

Herbarium voucher: New South Wales: Hanging Mountain, 20 km SW of Moruya, 26 Nov. 1981, *H. Streimann 15915* (CBG 8113117.1).

Qld, **NSW**, **Lord Howe I.**

Frullania queenslandica Steph.

Ref.: Hattori 1979b (tax., dist.)

Herbarium voucher: New South Wales: Tianjara Falls, Tianjara Creek, 30 km NW of Ulladulla, 21 Jun. 1979, *H. Streimann 7818* (CBG 7909221.1).

Qld, **NSW**, **Vic.**

Frullania repandistipula Sande Lac.

Ref.: Hattori 1987a (tax.)

Frullania repandistipula subsp. **queenslandica** S.Hatt.

Ref.: Hattori 1987a (tax., dist.)

Herbarium voucher: Queensland: Big Tableland, 26 km S of Cooktown, 4 Jul. 1984, *H. Streimann 30785* (CBG 9908993.1).

Qld

Frullania rostrata (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees

≡ *Jungermannia rostrata* Hook.f. & Taylor

= *Jungermannia congesta* Hook.f. & Taylor

= *Frullania diplota* Taylor

= *Frullania junghuhniana subsp. wattsii* S.Hatt.

= *Frullania megalocarpa* Taylor

= *Frullania minutistipula* Steph.

Ref.: Hattori 1979a (dist.)

Herbarium voucher: New South Wales: Blue Range, 25 km WNW of Canberra, 25 Apr. 1980, *H. Streimann 10183* (CBG 8003775.1).

The first Queensland report by Hattori (1984) was based on an anomalous plant that is probably referable to another species.

Qld, **NSW**, **ACT**, **Vic.**, **Tas.**, **Macquarie I.**

Frullania rubella Gottsche ex Steph.

Ref.: Hattori 1979a (tax.)

Frullania rubella var. **elongata** (Steph.) S.Hatt.

≡ *Frullania elongata* Steph.

Ref.: Hattori 1983 (tax.); Hattori 1984 (dist.)

Qld, **NSW**

Frullania rubella var. **rubella**

= *Frullania filipendula* Steph.

Ref.: Hattori 1979a (tax., dist.)

Herbarium voucher: Queensland: Yungaburra Road, 2 km SE of Atherton, 27 Feb. 1983, *H. Streimann 16847* (CBG 8302480.1).

Qld, **NSW**, **Lord Howe I.**

Frullania schusteri S.Hatt.

Ref.: Hattori 1988 (tax., dist.)

Qld

Frullania scottiana S.Hatt.

Ref.: Hattori 1987a (tax., dist.)

Herbarium voucher: (isotype: MELU H006952).

Qld

Frullania seriata Gottsche ex Steph.

= *Frullania difficilis* Steph.

= *Frullania dietrichiana* Steph.

Ref.: Hattori 1979a (tax., dist.)

Herbarium voucher: Queensland: Yungaburra Road, 2 km SE of Atherton, 27 Feb. 1983, *H. Streimann 16813* (CBG 8302446.1).

Qld, **NSW**

Frullania serrata Gottsche

= *Frullania ballinensis* Steph.

Ref.: Hattori 1984 (tax., dist.)

Herbarium voucher: Queensland: Koombooloomba Dam Road, 23 km SE of Ravenshoe, 23 Jun. 1984, *H. Streimann* 28873 (CBG 8407001.1).

Qld, **NSW**

Frullania setchellii Pearson

= *Frullania engelii* S.Hatt.

Ref.: Hattori 1983 (tax.)

Herbarium voucher: New South Wales: Chaelundi Mountain, 37 km N of Ebor, 14 Oct. 1978, *H. Streimann 6720* (CBG 7905464.1).

Qld, **NSW, Tas.**

Frullania sheana S.Hatt.

Ref.: Hattori 1979a (tax., dist.)

Herbarium voucher: Queensland: Browns Creek, Lockhart River Settlement road, 30 km SW of Cape Weymouth (18 km NW of Lockhart River Settlement), 12 Oct. 1995, *H. Streimann 56448* (CBG 9518480.1).

Qld

Frullania simmondsii Steph.

Ref.: Hattori 1979b (tax., dist.)

Qld

Frullania sinskeana J.J.Engel & B.C.Tan

≡ *Frullania spathulistipa* Steph., *nom. inval.*

Ref.: Tan & Engel 1986 (tax.); Hattori 1979b (dist.)

Herbarium voucher: Lord Howe Island: Mt Gower summit, 23 Oct. 1978, *M.D. Crisp 4557b* (CBG 7811481.1).

NSW, **Vic., Lord Howe I.**

Frullania spinifera Taylor

Ref.: Hattori 1983 (tax.)

Herbarium voucher: New South Wales: Macquarie Pass, 28 km SW of Wollongong, 12 Aug. 1977, *H. Streimann 4805* (CBG 7707714.1).

Qld, **NSW**

Frullania spinigastria S.Hatt.

Ref.: Hattori 1979a (tax., dist.)

Herbarium voucher: New South Wales: Currowan State Forest, Carters Creek, 20 km NW of Batemans Bay, 23 Aug. 1983, *H. Streimann 27862* (CBG 8309880.1).

NSW

Frullania squarrosula (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

≡ *Jungermannia squarrosula* Hook.f. & Taylor

Ref.: Hattori 1983 (tax., dist.)

Herbarium voucher: New South Wales: Bungonia Creek Gorge, 28 km ESE of Goulburn, 14 Sep. 1978, *H. Streimann 6180* (CBG 7902597.1).

WA, **NT**, **Qld**, **NSW**, **ACT**, **Vic.**

Frullania steereana S.Hatt.

Ref.: Hattori 1987a (tax., dist.)

Herbarium voucher: MELU H007540 (isotype)

Qld

Frullania streimannii S.Hatt.

Ref.: Hattori 1983 (tax., dist.)

Herbarium voucher: New South Wales: Gloucester River, 28 km WSW of Gloucester, 10 Oct. 1978, *H. Streimann 6448* (CBG 7904694.1).

Qld, **NSW**

Frullania subincumbens S.Hatt.

Ref.: Hattori 1987b (tax., dist.)

Herbarium voucher: New South Wales: Lord Howe Island: Western slopes of Mt Gower, on track to summit, 10 Jun. 2000, *E.A. Brown & A.J. Leishman 2000/40* (NSW 443914).

Lord Howe I.

Frullania subtropica Steph.

Ref.: Hattori 1979b (tax., dist.)

Herbarium voucher: New South Wales: Bolivia Hill, 11 km NNE of Deepwater, 23 Jan. 1980, *H. Streimann 9963* (CBG 8002524.1).

NT, **Qld**, **NSW**

Frullania ternatensis Gottsche

Frullania ternatensis var. **nonappendiculata** S.Hatt.

Ref.: Hattori 1984 (tax., dist.)

One Australian specimen (*Hicks 11288*), a male, was attributed to this species by Hattori with reservation.

Qld

Frullania thiersiae S.Hatt.

Ref.: Hattori 1988 (tax., dist.)

Herbarium voucher: Queensland: Bellenden Ker Range, Mulgrave River catchment, track between Choorichillum and Bartle Frere (South Peak), Wooroonooran National Park, 30 Mar. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 6440* (NSW 896979).

Qld

Frullania victoriensis Steph.

Ref.: Hattori 1979a (tax., dist.)

Herbarium voucher: Queensland: Great Dividing Range, Mt Baldy, 4 km SW of Atherton, 2 Jul. 1984, *H. Streimann 30641* (CBG 8409146.1).

Qld, **NSW**, **ACT**, **Vic.**

Frullania vittiana S.Hatt.

Ref.: Hattori 1987b (tax., dist.)

Herbarium voucher: New South Wales: Lord Howe Island: Smoking Tree Ridge, on track to Goathouse, c. 500 m beyond junction with Rocky Run track, 9 Jun. 2000, *E.A. Brown 2000/18* (NSW 444691).

Lord Howe I.

Frullania yorkiana Steph.

Ref.: Hattori 1979b (tax., dist.)

Herbarium voucher: Queensland: Mt Bellenden Ker South Peak, 23 km SSE of Gordonvale, 3 Mar. 1983, *H. Streimann 27498* (CBG 8305463.1).

Frullania yorkiana was proposed as a synonym of *Frullania fugax* by Hentschel et al. (2015), following Hattori's (1979) observation that the *F. yorkiana* lectotype was similar to *F. fugax*. We consider this synonymisation premature and retain *Frullania yorkiana* as an accepted taxon following Hattori (1979b) pending critical comparison between plants of these respective species from Cape York and New Zealand.

Qld

Gackstroemia Trevis.

Gackstroemia alpina R.M.Schust.

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: 6 Dec. 2007 (CHR 595448).

Tas.

Gackstroemia weindorferi (Herzog) Grolle

≡ *Lepidolaena weindorferi* Herzog

Ref.: Söderström et al. 2016 (tax.); Scott 1985 (dist.)

Herbarium voucher: Victoria: Ada River, Powelltown, 12 Apr. 1989, *E.A. Brown 89/69* (NSW 436621).

NSW, **Vic.**, **Tas.**, **Macquarie I**

Geocalyx Nees

Geocalyx caledonicus Steph.

= *Chiloscyphus montanus* Steph., *nom. illeg.*

Ref.: Söderström et al. 2016 (tax.); Scott 1985 (dist.)

Herbarium voucher: Tasmania: King River, 11.3 km by road from Regatta Point and 13.3 km by road from Strahan Harbour; stream which enters King River under wooden bridge, 27 Feb. 1977, *J.J. Engel 14926* (HO 530577).

NSW, **Vic.**, **Tas.**, **Lord Howe I.**

Goebelobryum Grolle

Goebelobryum grossitextum (Steph.) Grolle

≡ *Marsupidium grossitextum* Steph.

= *Acrobolbus cyaneus* Herzog

Ref.: Söderström et al. 2016 (tax.); Engel & Glenny 2012 (dist.)

Herbarium voucher: Western Australia: Walpole area, Knoll Drive, Delaney Lookout, 14 Oct. 2006, *R.D. Seppelt 26244* (HO 543611).

WA

Goebelobryum unguiculatum (Hook.f. & Taylor) Grolle

≡ *Jungermannia unguiculata* Hook.f. & Taylor

Ref.: Söderström et al. 2016 (tax.); Engel & Glenny 2012 (dist.)

Herbarium voucher: Victoria: c. 2 km S of Wall of China, 5 Jul. 1998, *A.J. Franks* (MEL 2055359A).

WA, **Qld**, **NSW**, **Vic.**, **Tas.**

Goebelobryum vermiculare J.J.Engel & Glenny

Ref.: Söderström et al. 2016 (tax.); Engel & Glenny 2012 (dist.)

Herbarium voucher: Tasmania: South West Wilderness area, Gordon Road, Lake Pedder, Teds Beach, 14 May 2008, *R.D. Seppelt 26886* (HO 561937).

Tas.

Gongylanthus Nees

Ref.: Crandall-Stotler et al. 2009b (tax.)

Gongylanthus scariosus (Lehm.) Steph.

≡ *Jungermannia scariosa* Lehm.

Herbarium voucher: Western Australia: Darling Range Regional Park, Zig Zag Road, 29 Aug. 2004, *D.C. Cargill 593* (CANB 758927.1).

WA, **SA**, **Vic.**

Gottschea Nees ex Mont.

= *Paraschistochila* R.M.Schust.

Ref.: Engel & Glenny 2019b (tax.)

The recognition of *Gottschea* renders *Schistochila* paraphyletic, according to molecular phylogenetic evidence presented by He & Glenny (2014). As circumscribed on morphological features by Engel and Glenny (2019) *Gottschea* is probably not monophyletic, given *Schistochila gayana* nests among *Gottschea* species in earlier molecular phylogenies. We accept *Gottschea* more for convenience than conviction, as most specimens in Australian herbaria are already housed under this name, and it is likely that further refinement of generic circumscription within Schistochilaceae will occur. Wholescale revision of generic level classification as an immediate response to incremental insight is pure folly. We consider it better is to wait until a robust, durable, and complete understanding of relationships has been attained, and considered.

Gottschea aligera (Nees & Blume) Nees

≡ *Jungermannia aligera* Nees & Blume

Paraschistochila aligera (Nees & Blume) R.M.Schust.

Schistochila aligera (Nees & Blume) J.B.Jack & Steph.

Ref.: Meagher 2010a (dist.)

Herbarium voucher: Queensland: Mt Finnigan, on and flanks of the summit, Cedar Bay National Park, 8 Jun. 2017, *M.A.M. Renner, H. Hancock, T. Houghton, L. Roberts, A. Rouse & S. Worboys* 8001 (NSW 1060488).

Qld, **Lord Howe I.**

Gottschea brotheri (Steph.) Grolle & Zijlistra

≡ *Schistochila brotheri* Steph.

Ref.: Meagher 2010a (dist.)

Herbarium voucher: New South Wales: Head of Wilson's Creek, Richmond River, *W.W. Watts Hepat 780* (NSW 763539).

Qld, **NSW**

Gottschea isotachyphylla (J.J.Engel & R.M.Schust.) J.J.Engel

≡ *Paraschistochila isotachyphylla* J.J.Engel & R.M.Schust.

Schistochila isotachyphylla (J.J.Engel & R.M.Schust.) Xiao L.He & Glenny

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: plateau region E and SE of Mt Eliza summit, east of Lake Pedder, 27 Jan. 1977, *J.J. Engel 13688* (HO 90815).

Tas.

Gottschea lacerata (Steph.) Grolle & Zijlistra

≡ *Schistochila lacerata* Steph.

Paraschistochila lacerata (Steph.) R.M.Schust.

Ref.: Meagher 2010a (dist.)

Herbarium voucher: Queensland: Mossman Gorge, Rex Creek, above intersection with Rex Loop track, Daintree National Park, 10 Jul. 2005, *E.A. Brown & M.A.M. Renner 2051* (NSW 1005875).

Qld

Gottschea philippinensis Mont.

≡ *Paraschistochila philippinensis* (Mont.) R.M.Schust.

Schistochila philippinensis (Mont.) Steph.

Schistochila philippinensis (Mont.) J.B.Jack & Steph., *nom. illeg.*

Ref.: Meagher 2010a (dist.)

Herbarium voucher: Queensland: [No details given.], 1880, *J. Chalmers* (MEL 0046959A).

Qld

Gottschea pinnatifolia (Hook.) Nees

≡ *Jungermannia pinnatifolia* Hook.

Schistochila pinnatifolia (Hook.) Trevis.

= *Jungermannia ciliigera* Hook.f. & Taylor

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: Cradle Mountain - Lake St. Clair National Park, Pine Valley, Cephissus Falls, NW of Lake St. Clair, 10 Feb. 1977, *J.J. Engel 14257* (CANB 769727.1).

Tas.

Gottschea tuloides (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

≡ *Jungermannia tuloides* Hook.f. & Taylor

Paraschistochila tuloides (Hook.f. & Taylor) R.M.Schust.

Schistochila tuloides (Hook.f. & Taylor) Steph.

= *Schistochila fragilis* Steph.

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: Rabalga Road, 21 Mar. 2019, *J. Jarman* (HO 597133).

Tas.

Gymnomitrion Corda, *nom. cons.*

Gymnomitrion incompletum (Gottsche) R.M.Schust.

≡ *Jungermannia incompleta* Gottsche

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Mt. Wellington, summit rocks, 11 Mar. 1980, *A.V. Ratkowsky H989* (CBG 8205271.1).

The relationships between *Gymnomitrion incompletum* and the New Zealand species *G. cuspidatum* warrant further scrutiny.

NSW, **Vic.**, **Tas.**

Haplomitrium Nees, *nom. cons.*

Ref.: Crandall-Stotler et al. 2009b (tax.)

Haplomitrium gibbsiae (Steph.) R.M.Schust.

≡ *Calobryum gibbsiae* Steph.

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Mt Norold, 24 Feb. 1994, *J. Jarman* (HO 574213).

Tas.

Haplomitrium intermedium Berrie

Ref.: Söderström et al. 2016 (tax.)

Herbarium voucher: New South Wales: Blue Mountains, Bowen Creek Road, off Bells Line of Road, 16 Dec. 2010, *A.J. Downing & D.A. Meagher* (NSW 880254).

NSW

Hepatostolonophora J.J.Engel & R.M.Schust.

Hepatostolonophora paucistipula (Rodway) J.J.Engel

≡ *Lophocolea paucistipula* Rodway

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: Tasmania: Viormy Tasmanian Land Conservancy property, Nive River, Skullbone Plains Road bridge, 25 Feb. 2014, *L.H. Cave 1946* (HO 572697).

Vic., **Tas.**

Hepatostolonophora rotata (Hook.f. & Taylor) J.J.Engel

≡ *Jungermannia rotata* Hook.f. & Taylor

Aplozia rotata (Hook.f. & Taylor) Rodway

= *Aplozia alpina* f. *stipulata* Rodway

= *Aplozia alpina* Rodway

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: Tasmania: Cradle Mountain Lake St Clair National Park, The Labyrinth, NNW of Lake St Clair, 11 Feb. 1977, *J.J. Engel 14287* (HO 90682).

Tas.

Herbertus Gray

Herbertus longifissus Steph.

= *Herbertus huerlimannii* H.A.Mill.

Ref.: So 2003 (tax., dist.)

Herbarium voucher: Queensland: Mt Finnegan, track from Roberts farm to summit, Cedar Bay National Park, 7 Jun. 2017, *M.A.M. Renner, H. Hancock, T. Houghton, L. Roberts, A. Rouse & S. Worboys 8066* (NSW 1060537).

Qld

Herbertus oldfieldianus (Steph.) Rodway

≡ *Schisma oldfieldianum* Steph.

= *Schisma alpinum* Steph.

Herbertus alpinus (Steph.) E.A.Hodgs.

Ref.: Engel & Glenny 2008 (tax.)

Herbarium voucher: Tasmania: Mt Sprent, 14 Feb. 1987, *J. Jarman* (HO 570733).

Tas., **Macquarie I.**

Herzogobryum Grolle

Ref.: Shaw et al. 2015 (tax.)

Herzogobryum atrocapillum (Hook.f. & Taylor) Grolle

≡ *Gymnomitrion atrocapillum* Hook.f. & Taylor

Ref.: Engel & Glenny 2008 (tax.)

Herbarium voucher: Tasmania: Mt. Wellington summit, 2 Jan. 1981, *A.V. Ratkowsky H994* (CBG 8205272.1).

NSW, **Vic.**, **Tas.**, **Macquarie I.**

Heteroscyphus Schiffn., *nom. cons.*

= *Lophocolea* sect. *Cyanolophocolea* R.M.Schust.

Cyanolophocolea (R.M.Schust.) R.M.Schust.

Ref.: Engel & Glenny 2019a (tax.)

Heteroscyphus allodontus (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

≡ *Jungermannia allodonta* Hook.f. & Taylor

Chiloscyphus allodontus (Hook.f. & Taylor) E.A.Hodgs.

Lophocolea allodonta (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

= *Jungermannia biciliata* Hook.f. & Taylor

Chiloscyphus biciliatus (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees

Heteroscyphus biciliatus (Hook.f. & Taylor) J.J.Engel

= *Chiloscyphus cambewarranus* Steph.

Heteroscyphus cambewarranus (Steph.) J.J.Engel & R.M.Schust.

= *Chiloscyphus piperitus* Mitt.

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: New South Wales: Cambewarra, Oct. 1901, *W. Forsyth s.n.* (NSW 763406).

NSW, **Tas.**

Heteroscyphus ammophilus (Colenso) R.M.Schust.

≡ *Chiloscyphus ammophilus* Colenso

= *Chiloscyphus fissistipus f. integrifolius* Rodway

Ref.: Engel & Glenny 2019a (tax.)

Heteroscyphus ammophilus var. **ammophilus**

Ref.: Engel & Glenny 2019a (tax., dist.)

Tas.

Heteroscyphus ammophilus var. **obtusifolius** J.J.Engel & G.L.Merr.

Ref.: Engel & Glenny 2019a (tax., dist.)

Tas.

Heteroscyphus argutus (Reinw., Blume & Nees) Schiffn.

≡ *Jungermannia arguta* Reinw., Blume & Nees

Chiloscyphus argutus (Reinw. Blume & Nees) Nees

= *Jungermannia retrospectans* Nees

= *Jungermannia endlicheriana* Nees

Chiloscyphus endlicherianus (Nees) Nees

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: Queensland: Mt Lewis Road, Mt Lewis National Park, 10 May 2018, *M.A.M. Renner & H. Sauquet 8753* (NSW 1058013).

Qld, **NSW**, **Vic.**, **Lord Howe I.**, **Norfolk I.**

Heteroscyphus aselliformis (Reinw., Blume & Nees) Schiffn.

≡ *Jungermannia aselliformis* Reinw., Blume & Nees

Qld

Heteroscyphus billarderii (Schwägr.) Schiffn.

≡ *Jungermannia billarderii* Schwägr.
Chiloscyphus billarderii (Schwägr.) Nees

= *Chiloscyphus circumdentatus* W.Martin & E.A.Hodgs.

= *Chiloscyphus simillimus* Steph.
Heteroscyphus simillimus (Steph.) J.J.Engel & R.M.Schust.

Heteroscyphus billarderii var. **billarderii**

= *Heteroscyphus circumdentatus* (W.Martin & E.A.Hodgs.) J.J.Engel & R.M.Schust.

Ref.: Engel 2015 (tax.); Engel & Glenny 2019a (dist.)

Tas.

Heteroscyphus billarderii var. **clasmatocoleoides** (J.J.Engel & G.L.Merr.) J.J.Engel

≡ *Heteroscyphus circumdentatus var. clasmatocoleoides* J.J.Engel & G.L.Merr.

= *Chiloscyphus billarderii f. integrifolius* Rodway

Ref.: Engel 2015 (tax.); Engel & Glenny 2019a (dist.)

Tas.

Heteroscyphus ciliatus (Steph.) Schiffn.

≡ *Chiloscyphus ciliatus* Steph.
Chiloscyphus billarderii f. ciliatus (Steph.) Rodway

= *Chiloscyphus billarderii var. hookerianus* Gottsche, Lindenb. & Nees

Ref.: Engel & Glenny 2019a (tax., dist.)

Macquarie I.

Heteroscyphus coalitus (Hook.) Schiffn.

≡ *Jungermannia coalita* Hook.

= *Chiloscyphus maximus* Steph.
Heteroscyphus maximus (Steph) J.J.Engel & R.M.Schust.

= *Lophocolea sexdentata* Steph.
Heteroscyphus sexdentatus (Steph.) J.J.Engel

= *Chiloscyphus communis* Steph.

Ref.: Engel & Glenny 2019a (tax.)

Heteroscyphus coalitus var. **coalitus**

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: Tasmania: Track to Junee Cave, c. 4 km NW of Maydena, 8 Apr. 2000, *N. Klazenga 5566* (MEL 2076777A).

Qld, **NSW**, **Vic.**, **Tas.**

Heteroscyphus coalitus var. **simplicifolius** J.J.Engel

Ref.: Engel & Glenny 2019a (tax., dist.)

Tas.

Heteroscyphus combinatus (Nees) Schiffn.

≡ *Jungermannia combinata* Nees

A species with a Javan type, recorded for Tasmania by McCarthy (2003) but not mentioned by Engel & Glenny (2019a). Tasmanian records are likely based on misidentifications, but we have been unable to confirm this.

?Tas.

Heteroscyphus conjugatus (Mitt.) J.J.Engel & R.M.Schust.

≡ *Chiloscyphus conjugatus* Mitt.

= *Chiloscyphus moorei* Steph.
Lophocolea moorei (Steph.) Steph.
Heteroscyphus moorei (Steph.) J.J.Engel & R.M.Schust.

= *Chiloscyphus conjugatus f. dentatus* Rodway

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: Tasmania: Serpentine River valley, 200 m downstream of the dam, S of Gordon River, 18 Feb. 1998, *J.E. Braggins 98/057* (HO 553572).

Tas.

Heteroscyphus echinellus (Lindenb. & Gottsche) J.J.Engel & Xiao L.He

≡ *Lophocolea echinella* Lindenb. & Gottsche
Chiloscyphus echinellus (Lindenb. & Gottsche) Mitt.
Cyanolophocolea echinella (Lindenb. & Gottsche) R.M.Schust.

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: Tasmania: Newhaven Road, just S of Doughboy Hill, 0.4 km E of junction with Mawbanna Road, S of Port Latta, 16 Mar. 1983, *J.J. Engel 19719* (CANB 805573.1).

NSW, **Vic.**, **Tas.**, **Lord Howe I.**

Heteroscyphus fissistipus (Hook.f. & Taylor) Schiffn.

≡ *Jungermannia fissistipa* Hook.f. & Taylor
Chiloscyphus fissistipus (Hook.f. Taylor) Gottsche, Lindenb. & Nees

= *Chiloscyphus fissistipus var. longifolius* Carrington & Pearson
Chiloscyphus longifolius (Carrington & Pearson) Steph.
Heteroscyphus longifolius (Carrington & Pearson) Schiffn.

= *Chiloscyphus spinosus* Gottsche ex Gottsche, Lindenb. & Nees, *nom. inval.*

Ref.: Engel & Glenny 2019a (tax.)

Queensland records, especially those from the Wet Tropics Bioregion, need checking.

Heteroscyphus fissistipus var. **fissistipus**

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: Tasmania: Gordon River Road near The Hermit, 18 Feb. 2018, *J. Jarman* (HO 591087).

Qld, **NSW**, **Vic.**, **Tas.**, **Lord Howe I.**

Heteroscyphus gunnianus (Mitt.) J.J.Engel & R.M.Schust.

≡ *Chiloscyphus gunnianus* Mitt.

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: Tasmania: slopes of Mt Sprent, 10 Feb. 1987, *J. Jarman* (HO 570719).

Vic., **Tas.**

Heteroscyphus knightii (Steph.) Grolle

≡ *Chiloscyphus knightii* Steph.

= *Chiloscyphus tridentatus* Mitt.
Heteroscyphus tridentatus (Mitt.) J.J.Engel & R.M.Schust.

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: Tasmania: Viormy Tasmanian Land Conservancy property, SW end, 25 Feb. 2014, *L.H. Cave 1932* (HO 573560).

Tas.

Heteroscyphus levieri (Steph.) Schiffn.
≡ *Chiloscyphus levieri* Steph.
Ref.: Engel & Glenny 2019a (tax., dist.)

Tas.

Heteroscyphus limosus (Carrington & Pearson) Schiffn.
= *Chiloscyphus limosus* var. *laevigatus* Carrington & Pearson
≡ *Chiloscyphus limosus* Carrington & Pearson
Ref.: Engel & Glenny 2019a (tax., dist.)
Herbarium voucher: Tasmania: Manuka Road, unlogged coupe WR008J, 5 May 1998, *J. Jarman* (HO 588714).

Tas.

Heteroscyphus menziesii (Mitt.) J.J.Engel
≡ *Chiloscyphus menziesii* Mitt.
= *Chiloscyphus weymouthianus* Steph.
Heteroscyphus weymouthianus (Steph.) Schiffn.
Ref.: Engel & Glenny 2019a (tax., dist.)

Tas.

Heteroscyphus mononuculus J.J.Engel
Ref.: Engel & Glenny 2019a (tax., dist.)
Heteroscyphus mononuculus var. **ammophilopsis** J.J.Engel
Ref.: Engel & Glenny 2019a (tax., dist.)

Tas.

Heteroscyphus mononuculus var. **mononuculus**
Ref.: Engel & Glenny 2019a (tax., dist.)

Tas.

Heteroscyphus multifidus (Steph.) J.J.Engel & R.M.Schust.
≡ *Chiloscyphus multifidus* Steph.
Ref.: Engel & Glenny 2019a (tax., dist.)
Heteroscyphus multifidus var. subintegerrimus J.J.Engel
Ref.: Engel (2015 (tax., dist.)
Herbarium voucher: Tasmania: Cradle Mtn, Lake St. Clair National Park, *J.J. Engel 19573* (HO).

Tas.

Heteroscyphus planiusculus (Hook.f. & Taylor) J.J.Engel
≡ *Jungermannia planiuscula* Hook.f. & Taylor
Ref.: Engel & Glenny 2019a (tax., dist.)
Engel & Glenny (2019a) treat *Heteroscyphus planiusculus* as endemic to New Zealand.

Heteroscyphus sinuosus (Hook.) Schiffn.
≡ *Jungermannia sinuosa* Hook.
Chiloscyphus sinuosus (Hook.) Nees
Ref.: Engel & Glenny 2019a (tax., dist.)
Herbarium voucher: Tasmania: Lichen Hill, 10 Aug. 2010, *J. Jarman* (HO 558249).

Tas.

Heteroscyphus splendens (Lehm. & Lindenb.) Grolle
≡ *Jungermannia splendens* Lehm. & Lindenb.
Ref.: Grolle & Piippo 1984 (tax.)
Herbarium voucher: Queensland: Mossman Gorge, Rex Creek, above intersection with Rex Loop track, Daintree National Park, 10 Jul. 2005, *E.A. Brown & M.A.M. Renner 2035* (NSW 1005854).
Heteroscyphus splendens is reported new for Australia based on relatively recent collections made in the Wet Tropics Bioregion of Queensland.

Qld

Heteroscyphus supinus (Hook.f. & Taylor) R.M.Schust.
≡ *Chiloscyphus supinus* Hook.f. & Taylor
= *Chiloscyphus glaucescens* Steph.
Ref.: Engel & Glenny 2019a (tax., dist.)

NSW, **Tas.**

Heteroscyphus tasmanicus (Steph.) J.J.Engel & R.M.Schust.
≡ *Chiloscyphus tasmanicus* Steph.
Heteroscyphus tasmanicus remains poorly understood, critical study of original material is required as a first step to improving our knowledge of it. Engel (2015) made this a synonym of *Heteroscyphus billardierei* var. *billardierei*.

Tas.

Heteroscyphus triacanthus (Hook.f. & Taylor) Schiffn.
≡ *Lophocolea triacantha* Hook.f. & Taylor
= *Jungermannia triacantha* Hook.f. & Lév.
Chiloscyphus triacanthus (Hook.f. & Lév.) Steph.
= *Chiloscyphus odoratus* Mitt.
Ref.: Engel & Glenny 2019a (tax., dist.)
Heteroscyphus triacanthus var. **magnistipulatus** J.J.Engel
Ref.: Engel & Glenny 2019a (tax., dist.)

Tas.

Heteroscyphus triacanthus var. **triacanthus**
Ref.: Engel & Glenny 2019a (tax., dist.)

Tas.

Heteroscyphus varians (Steph.) J.J.Engel
≡ *Lophocolea varians* Steph.
Chiloscyphus varians (Steph.) J.J.Engel & R.M.Schust.
Ref.: Engel & Glenny 2019a (dist.)
Herbarium voucher: Australian Capital Territory: Tower (2.5 km N of Orroral Tracking Station), 36 km SSW of Capital Hill, Canberra, 22 Oct. 1987, *H. Streimann* 38962 (CBG 9402069.1).

NSW, **ACT**, **Vic.**

Heteroscyphus zollingeri (Gottsche) Schiffn.
≡ *Chiloscyphus zollingeri* Gottsche
The status of *Heteroscyphus zollingeri* in Australia is unresolved. Plants suspected to be this species have been collected in the Wet Tropics Bioregion of north-east Queensland and require further study.

?Austr.

Hygrolembidium R.M.Schust.
Ref.: Engel & Glenny 2008 (tax.)
Hygrolembidium acrocladum (Berggr.) R.M.Schust.
≡ *Aplozia acroclada* Berggr.
= *Aplozia lacerata* Rodway
= *Lembidium isodictyon* Herzog
Ref.: Engel & Glenny 2008 (tax., dist.)
Herbarium voucher: Victoria: Mount Kosciusko National Park, stream valley on NE slope of Mount Kosciusko between Rawson Pass and Rawsons Hut, 7 May 1977, *J.J. Engel 17141* (NSW665593).

NSW, **Vic.**, **Tas.**

Hymenophyton Dumort.
Ref.: Crandall-Stotler et al. 2009b (tax.)
Hymenophyton flabellatum (Labill.) Dumort. ex Trevis.

≡ *Jungermannia flabellata* Labill.

= *Umbraculum muelleri* Gottsche

Herbarium voucher: New South Wales: Mt Wilson. Lower Falls. Blue Mountains National Park, 25 Sep. 2001, *D.C. Cargill 255MW* (CANB 652982.1).

Qld, **NSW**, **Vic.**, **Tas.**

Hymenophyton leptopodum (Hook.f. & Taylor) A.Evans

≡ *Jungermannia leptopoda* Hook.f. & Taylor

Herbarium voucher: Tasmania: New River, c. 7 km N of New River Lagoon, 6 Feb. 2016, *L.H. Cave 3235* (HO 584340).

Tas.

Isolembidium R.M.Schust.

Ref.: Engel & Glenny 2008 (tax.)

Isolembidium anomalum (Rodway) Grolle

≡ *Lembidium anomalum* Rodway

Ref.: Engel & Glenny 2008 (tax., dist.)

Isolembidium anomalum var. **anomalum**

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: West Coast Range, Proprietary Peak, just N of Mt Jukes, 8 Apr. 1983, *J.J. Engel 20056* (HO 530654).

Tas.

Isolembidium anomalum var. **cucullatum** (E.A.Hodgs.) J.J.Engel & R.M.Schust.

≡ *Lembidium cucullatum* E.A.Hodgs.

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Mt Sprent, 17 Mar. 1991, *A. Moscal 21480* (HO 134094).

Tas.

Isophyllaria E.A.Hodgs. & Allison

Ref.: Engel & Glenny 2008 (tax.)

Isophyllaria attenuata (Rodway) E.A.Hodgs.

≡ *Isotachis attenuata* Rodway

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Mt Eliza summit, Mt Anne track, Southwest Conservation Area, 22 Jan. 2012, *E.A. Brown & M.A.M. Renner 5913* (HO 584183).

Tas.

Isotachis Mitt.

Ref.: Engel & Glenny 2019a (tax.)

Isotachis grandis Carrington & Pearson

Lectotype (here designated): New South Wales: Lawson, Jun. 1884, *T.W. Whitelegge s.n.* (NSW 476021).

Ref.: Engel & Glenny 2019a (dist.)

By implication from the title of the article in which *Isotachis grandis* was published, the type was gathered by Whitelegge. A specimen agreeing with the protologue, gathered by Whitelegge, and held by NSW is here designated the lectotype: NSW 476021.

NSW, **Vic.**, **Tas.**

Isotachis hastatistipula (Steph.) J.J.Engel

= *Balantiopsis hastatistipula* Steph.

Ref.: Engel et al. 2014 (tax., dist.)

Herbarium voucher: New South Wales: Blackheath, *Watts 1052* (G).

This is a poorly known taxon whose affinities with other *Isotachis* named based on specimens from the Blue Mountains should be carefully evaluated.

NSW

Isotachis intortifolia (Hook.f. & Taylor) Gottsche

≡ *Jungermannia intortifolia* Hook.f. & Taylor

= *Jungermannia multipenna* Hook.f. & Taylor

= *Isotachis inflexa* Gottsche

= *Isotachis terricola* Steph.

= *Isotachis gunniana* Mitt.

Ref.: Engel & Glenny 2019a (tax.); Engel & Glenny 2019b (dist.)

Herbarium voucher: Tasmania: Growling Swallet, 6 Apr. 2000, *N. Klazenga 5492* (MEL 2076704A).

NSW, **Vic.**, **Tas.**

Isotachis montana Colenso

Ref.: Engel & Glenny 2019a (tax.); Engel & Glenny 2019b (dist.)

Herbarium voucher: Tasmania: Junction of Florentine Road and Whytes Road, 8 km W of Maydena, 26 Apr. 1992, *J.A. Curnow 4460* (CBG 9503758.1).

Vic., **Tas.**, **Macquarie I.**

Isotachis riparia Rodway

Ref.: Engel & Glenny 2019b (dist.)

Herbarium voucher: Tasmania: Cradle Mountain, Jan. 1900, *L. Rodway 174* (HO 85969).

Tas.

Jackiella Schiffn.

Ref.: Crandall-Stotler et al. 2009b (tax.)

Jackiella curvata E.A.Hodgs. & Allison

Herbarium voucher: Tasmania: Arve Road, W of Geeveston, 28 Sep. 1990, *P.J. Dalton* 90.23 (HO 129580).

WA, **NSW**, **Vic.**, **Tas.**

Jackiella javanica Schiffn.

Herbarium voucher: Queensland: Rainbow Falls, North Mimosa Creek, Blackdown Tableland National Park, 36 km SE of Blackwater, 23 Aug. 1993, *H. Streimann* 52252 (CBG 9312917.1).

Qld, **NSW**

Jubula Dumort., *nom. cons.*

Ref.: Crandall-Stotler et al. 2009b (tax.)

Jubula hutchinsiae (Hook.) Dumort.

≡ *Jungermannia hutchinsiae* Hook.

Jubula hutchinsiae subsp. **australiae** Pócs & Cairns

Ref.: Pócs & Cairns 2008 (tax.)

Herbarium voucher: Queensland: Blue Gum Creek, adjacent to Paluma village water supply, 6 May 2007, *A. Cairns* (BRI AQ0810024).

Qld

Jungermannia L.

Ref.: Crandall-Stotler et al. 2009b (tax.)

Jungermannia appressifolia Mitt.

Ref.: Váňa & Piippo 1989b (tax.)

Herbarium voucher: Queensland: Windmill Creek, Main Coast Range, 14 km NNW of Mount Molloy, 30 Jun. 1984, *H. Streimann 30425* (CBG 8408931.1).

Qld

Kurzia G.Martens

Kurzia brevicalycina (Steph.) Grolle

≡ *Lepidozia brevicalycina* Steph.

Ref.: Grolle 1963b (tax.)

Herbarium voucher: New South Wales: Sandbank, Wardell Ferry, Richmond River, 25 Jun. 1902, *W.W. Watts 472* (NSW260227).

There are few definite records of *Kurzia brevicalycina* from Australia, though a syntype is held in NSW. *Kurzia brevicalycina* was tentatively recorded for New Caledonia by Elizabeth Brown. In Australia, *Kurzia brevicalycina* is possibly overlooked, or confused with *K. hippurioides*. More investigation of this species is required.

NSW

Kurzia calcarata (Steph.) Grolle

≡ *Lepidozia calcarata* Steph.

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: New South Wales: Adelina Falls, Lawson, Blue Mountains National Park, 2 Nov. 2004, *E.A. Brown, M.M. Heslewood & H.M. Macpherson 2004/38* (NSW 709779).

There are few definite records of *Kurzia calcarata* from Australia, and Australian material should be critically compared with New Zealand material and the type.

Qld, **NSW**, **Vic.**, **Tas.**

Kurzia dendroides (Carrington & Pearson) Grolle

≡ *Lembidium dendroides* Carrington & Pearson

≡ *Dendrolembidium dendroides* (Carrington & Pearson) Herzog

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: New South Wales: "Fairy Gotto" on the Pierce's Pass track near the Mount Wilson turnoff, Blue Mountains National Park, 25 Mar. 1989, *R.G. Coveny & P.D. Hind 12982* (NSW 457712).

NSW, **Tas.**

Kurzia hippurioides (Hook.f. & Taylor) Grolle

≡ *Jungermannia hippurioides* Hook.f. & Taylor

= *Jungermannia capillaris* Schwägr.

Lepidozia capillaris (Schwägr.) Lindenb.

= *Jungermannia dispar* Mont. ex Hook.f. & Taylor

Lepidozia dispar (Mont. ex Taylor & Hook.f.) Mont.

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Moores Garden, sandstone ridge c. 1 km N of Moores Bridge, 3 Feb. 2016, *L.H. Cave 3050* (HO 584444).

Queensland records of *Kurzia hippurioides* need to be critically compared with material from southern temperate Australasia.

WA, **Qld**, **NSW**, **Vic.**, **Tas.**

Kurzia lateconica (Steph.) Grolle

≡ *Lepidozia lateconica* Steph.

Ref.: Grolle 1963b (tax.)

Herbarium voucher: New South Wales: 5.7 km along Coral Ville Road, E of intersection with Pacific Highway, 13 Aug. 1997, *E.A. Brown, D.M. Crayn & N. Streiber 97/66* (NSW 411560).

Qld, **NSW**

Kurzia pallescens Grolle

≡ *Telaranea pallescens* (Grolle) J.J.Engel & G.L.Merr.

= *Kurzia quadriseta* Grolle

Ref.: Cooper et al. 2011 (tax.); Engel & Glenny 2008 (dist.)

Herbarium voucher: New South Wales: Bowens Creek, c. 50 m S of bridge, 8 Mar. 2004, *E.A. Brown, M.M. Heslewood & H. Mcpherson 2004/07* (NSW 700331).

NSW, **Tas.**

Kurzia reversa (Carrington & Pearson) Grolle

≡ *Lepidozia reversa* Carrington & Pearson

Ref.: Grolle 1963b (tax.)

The status of *Kurzia reversa* requires further investigation.

Qld, **NSW**, **Tas.**

Kurzia saddlensis (Besch. & C.Massal.) Grolle

≡ *Lepidozia saddlensis* Besch. & C.Massal.

Ref.: Grolle 1963b (tax.)

Herbarium voucher: Tasmania: Cradle Mountain, Jan. 1900, *L. Rodway* (HO 85500).

Australian records of *Kurzia saddlensis*, a species otherwise known from Chile, should be confirmed.

Tas.

Kurzia setiformis (De Not.) J.J.Engel & R.M.Schust.

≡ *Lepidozia setiformis* De Not.

Herbarium voucher: Tasmania: Sandfly Road, near Ludbeys, *W.A. Weymouth 410* (HO 85501).

Australian records of *Kurzia setiformis*, a species otherwise known from Chile, should be confirmed.

Tas.

Kurzia sexfida (Steph.) Grolle

≡ *Lepidozia sexfida* Steph.

Ref.: Grolle 1963b (tax.)

Herbarium voucher: New South Wales: Richmond River, Wardell Ferry, 23 Oct. 1900, *W.W. Watts Hepat 178* (NSW 262090).

The status of *Kurzia sexfida* requires further investigation.

NSW, **Tas.**

Kurzia tasmanica (Steph.) E.D.Cooper

≡ *Lepidozia tasmanica* Steph.

Telaranea tasmanica (Steph.) J.J.Engel & G.L.Merr.

Ref.: Cooper et al. 2013 (tax., dist.)

Tas.

Kurzia tenax (Grev.) Grolle

≡ *Jungermannia tenax* Grev.

Dendrolembidium tenax (Grev.) Herzog

= *Lepidozia appendiculata* Steph.

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: New South Wales: Blackheath, Grand Canyon, between ascent to Evans Lookout and Beauchamp Falls, Blue Mountains National Park, 12 Apr. 2014, *M.A.M. Renner 6847* (NSW 999761).

NSW, **Tas.**

Kurzia verticellata (Carrington) Grolle

≡ *Lepidozia verticellata* Carrington

= *Lepidozia verticillata* Carrington & Pearson, *nom. illeg.*

Ref.: Grolle 1963b (tax.)

The status of *Kurzia verticellata* requires further investigation.

Tas.

Leiomitra Lindb.

Ref.: Crandall-Stotler et al. 2009b (tax.)

Leiomitra elegans (Lehm.) Hässel

≡ *Trichocolea elegans* Lehm.

Herbarium voucher: Western Australia: Ad Flum. Cygnorum [Swan River], without date, *J.A.L. Preiss* (MEL 1037586A).

Leiomitra elegans was recorded from Australia on the basis of a single specimen by Katagiri who noted 'The specimen consists of a single sterile shoot, and identification is difficult. However, morphology of leaf fits well with South American plants of *L. elegans*.' The presence of this species in Australia should be confirmed on the basis of additional specimens.

WA

Lejeunea Lib., *nom. cons.*

= *Eulejeunea* Steph.

= *Stenolejeunea* R.M.Schust.

= *Rectolejeunea* A.Evans

= *Taxilejeunea* (Spruce) Steph.

Lejeunea aloba Sande Lac.

Herbarium voucher: Queensland: Highfields, *C.J. Wild* (BRI AQ0536792).

Lejeunea aloba was listed as present in Queensland by McCarthy (2003) based on Bolin & Henderson (2002), and we accept this Australian record based on the Queensland specimen determined by Dr B.M. Thiers.

Qld

Lejeunea anisophylla Mont.

= *Microlejeunea catanduana* Steph.

Lejeunea catanduana (Steph.) H.A.Mill.

Ref.: Lee 2013 (tax.)

Herbarium voucher: Queensland: Josephine Falls, Wooroonooran National Park, SSW of Babinda and 20 km NW of Innisfail, 31 Jul. 2006, *J.A. Curnow 6761* (CANB 898768.1).

Lejeunea anisophylla has been previously reported for Australia as *Lejeunea catanduana*.

Qld, **NSW**, **Lord Howe I.**, **Norfolk I.**

Lejeunea apiculata Sande Lac.

≡ *Stenolejeunea apiculata* (Sande Lac.) R.M.Schust.

Ref.: Renner et al. 2021 (tax.); Grolle 1982 (dist.)

Herbarium voucher: New South Wales: [No precise locality given.], Apr. 1898, *J.H. Maiden* (NSW 880478).

Qld, **NSW**, **Lord Howe I.**

Lejeunea apollinea Gottsche

Lejeunea apollinea is a poorly known taxon. The status of *Lejeunea apollinea* must be established with reference to the original material as a first step toward improving our knowledge.

?Austr.

Lejeunea armitii (Steph.) Steph.

≡ *Eulejeunea armitii* Steph.

Herbarium voucher: Queensland: Locality unknown, without date, *F.M. Bailey* Bailey Herb. 818 (BRI AQ0536782).

We accept *Lejeunea armitii* as present in Australia, though note that Australian records should be confirmed.

Qld

Lejeunea caespitosa Lindenb.

Herbarium voucher: Queensland: Burpengary, *C.J. Wild* (BRI AQ0536793).

In Australia *Lejeunea caespitosa* is known by early 20th Century collections only, the identity of which should be confirmed.

Qld

Lejeunea cocoes Mitt.

Ref.: Lee et al. 2014 (tax.)

Herbarium voucher: Queensland: Girringun National Park, Yamanie Section, 14 km by road WNW from Abergowrie, 26 Jul. 2006, *J.A. Curnow 6676A* (CANB 898665.1).

Lejeunea cocoes is reported here as a new record for Australia, based on recent collections from Queensland and Norfolk Island.

Qld, **Norfolk I.**

Lejeunea cuspidistipula (Steph.) Steph.

≡ *Eulejeunea cuspidistipula* Steph.

= *Rectolejeunea richmondensis* Steph.

= *Cheilolejeunea richmondiana* Watts, *nom. inval.*

Ref.: Grolle 1982 (tax., dist.)

Herbarium voucher: Queensland: `H Track', Paluma, Paluma Range, Mt Spec State Forest, 40 km S of Ingham, 28 Oct. 1995, *H. Streimann 57950* (CBG 9607455.1).

Qld, **NSW**, **Norfolk I.**

Lejeunea denticalyx (Steph.) Steph.

≡ *Eulejeunea denticalyx* Steph.

Ref.: Grolle 1982 (tax., dist.)

The identity of the plants in the type material needs to be established before the status of *Lejeunea denticalyx* can be resolved. Stephani's specific epithet may refer to prominent teeth on the perianth carinae near the perianth apex.

Norfolk I.

Lejeunea discreta Lindenb.

Ref.: Grolle 1982 (tax., dist.)

Herbarium voucher: New South Wales: Never Never Picnic Area, Rosewood Loop track, Dorrigo National Park, 8 Sep. 2018, *M.A.M. Renner, L. Shu & R-L. Zhu 8890* (NSW 1052737).

Qld, **NSW**, **Norfolk I.**

Lejeunea drummondii Taylor

≡ *Eulejeunea drummondii* (Taylor) Steph.

= *Eulejeunea tumida* f. *parvilobula* Rodway

= *Lejeunea tasmanica* Gottsche

= *Lejeunea gunniana* Mitt.

Cheilolejeunea gunniana (Mitt.) Steph.

Ref.: Renner 2013a (tax.); Grolle 1982 (dist.)

Herbarium voucher: Western Australia: Toolbrunup Peak, Stirling Range National Park, 26 Apr. 1984, *A. Stoneburner & R. Wyatt 3681B* (PERTH 4200748).

The name *Lejeunea drummondii* has been widely applied. Renner (2013b) made an attempt to demonstrate that *Lejeunea subelobata* was distinct, and while that demonstration was, regrettably, based on mislabelled molecular samples, the morphological differences documented do hold. Even as circumscribed to exclude *L. subelobata*, *L. drummondii* comprises a range of non-descript forms whose relationships warrant detailed investigation combining morphological and molecular evidence.

WA, **SA**, **Qld**, **NSW**, **ACT**, **Vic.**, **Tas.**

Lejeunea exilis (Reinw., Blume & Nees) Grolle

≡ *Jungermannia exilis* Reinw., Blume & Nees

Herbarium voucher: New South Wales: Border Ranges, Tweed Ranges Road, unnamed lookout, Border Ranges National Park, 19 Jun. 2005, *E.A. Brown & M.A.M. Renner 1505* (NSW 866046).

Qld, **NSW**, **Lord Howe I.**

Lejeunea flava (Schwägr.) Nees

≡ *Jungermannia flava* Schwägr.

= *Lejeunea rara* Steph.

= *Cheilolejeunea muscicola* Steph.

= *Lejeunea sinclairii* Spruce, *nom. illeg.*

Ref.: Grolle 1982 (tax., dist.)

Herbarium voucher: New South Wales: Road to Bird Tree, Middle Brother National Park, 6 Sep. 2018, *M.A.M. Renner, L. Shu & R-L. Zhu 8774* (NSW 1053575).

Qld, **NSW**, **Vic.**, **Tas.**, **Lord Howe I.**, **Norfolk I.**

Lejeunea flava subsp. *orientalis* R.M.Schust.

Lejeunea flava comprises several lineages including several having overlapping distributions in south-east Asia, Malesia and Oceania (Heinrichs et al. 2013), how these relate to Schuster's subspecific taxon has not been established. Until a detailed study of the *Lejeunea flava* complex has been completed we prefer to recognise the species in the broad sense for Australia, without further infra-specific segregates.

?Austr.

Lejeunea gracilipes (Taylor) Spruce

≡ *Omphalanthus gracilipes* Taylor

Lejeunea discreta var. *gracilipes* (Taylor) G.E.Lee & Heinrichs

= *Lejeunea norfolkiensis* Steph.

Hygrolejeunea norfolkiensis (Steph.) Steph.

Ref.: Renner et al. 2021 (tax.)

Herbarium voucher: Queensland: Finch Hatton Gorge, Eungella National Park, 22 Jun. 2005, *E.A. Brown & M.A.M. Renner 1511* (NSW 866064).

Qld, **NSW**

Lejeunea herzogii Mizut.

≡ *Cheilolejeunea pterota* Herzog

Ref.: Mizutani 1967 (tax.)

Herbarium voucher: Queensland: Mt Lewis, SW of Mossman, 29 Aug. 1982, *M.L. Hicks 11127* (BRI AQ0722750).

Qld

Lejeunea howeana Grolle

≡ *Cheilolejeunea wattsiana* Steph.

Ref.: Grolle 1982 (tax., dist.)

Herbarium voucher: New South Wales: Lord Howe Island: Erskine Valley, 5 Aug. 1911, *W.W. Watts LHI Hepat. 84* (NSW942546).

Lord Howe I.

Lejeunea lumbricoides (Nees) Nees

≡ *Jungermannia lumbricoides* Nees

= *Hygrolejeunea rostrata* Steph.

Ref.: Renner 2013a (tax., dist.)

Herbarium voucher: Norfolk Island: February 1885, *Isaac Robinson s.n.*, comm. von Müller, (element 1, separated as subpacket within G-23317!).

Norfolk I.

Lejeunea microloba Taylor

= *Taxilejeunea convexa* Steph.

Ref.: Grolle 1982 (tax., dist.)

Norfolk I.

Lejeunea patriciae Schäfer-Verwimp

≡ *Lejeunea pilifera* Tixier, *nom. illeg.*

Ref.: Lee & Pócs 2018 (tax., dist.)

Herbarium voucher: *Pócs & Streimann, 9986/AL* (EGR).

Qld

Lejeunea perichymidia M.A.M.Renner

= *Lejeunea epiphylla* Colenso, *nom. illeg.*

Ref.: Renner et al. 2021 (tax., dist.)

Herbarium voucher: Tasmania: Cartwright Creek, 25 Jan. 1980, *A.V. Ratkowsky H1063* (HO 303361).

Tas.

Lejeunea primordialis (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

≡ *Jungermannia primordialis* Hook.f. & Taylor

Microlejeunea primordialis (Hook.f. & Taylor) Steph.

Ref.: Grolle 1982 (tax.)

Lejeunea primordialis has been reported from WA, NT, Qld, NSW and Vic, in addition to Tasmania. All reports, except those from Tasmania and Victoria, are based on misidentifications of other small *Lejeunea* species, especially *Lejeunea cuspidistipula*.

Vic., **Tas.**

Lejeunea ramosissima Steph.

Herbarium voucher: Queensland: Conway State Forest, 16 km ENE of Proserpine, 28 Jun. 1986, *J.A. Curnow 1048* (CBG 9709347.1).

Australian records of *Lejeunea ramosissima* should be confirmed

Qld

Lejeunea reflexistipula (Lehm. & Lindenb.) Lehm. & Lindenb. ex Gottsche, Lindenb. & Nees

≡ *Jungermannia reflexistipula* Lehm. & Lindenb.

Reported for West Australia in McCarthy (2003). The type of *Lejeunea reflexistipula* is from Brazil, and we have seen no specimens supporting an Australian occurrence for this species.

?Austr.

Lejeunea sordida (Nees) Mont.

= *Hygrolejeunea sacculifera* Steph.

≡ *Jungermannia sordida* Nees

Ref.: Renner 2013a (tax., dist.)

Herbarium voucher: Norfolk Island: Red Road, on and amongst Macromitrium on Araucaria, 10 Sep. 1967, *D.M. Henderson 9529* (BM!)

Qld, **NSW**, **Norfolk I.**

Lejeunea stenodentata M.A.M.Renner & Pócs

≡ *Drepanolejeunea dentata* Steph.

Stenolejeunea dentata (Steph.) Pócs

Ref.: Renner et al. 2013c (tax., dist.)

Herbarium voucher: Queensland: Bellenden Ker Range, Russell River catchment, track to Choorichillum from end of Gourka Road, between NW summit and Choorichillum, Wooroonooran National Park, 30 Mar. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 6429* (NSW 896968).

Qld

Lejeunea subelobata Carrington & Pearson

Ref. Renner et al. 2021 (tax., dist.)

Herbarium voucher: Tasmania: Penganya, *T. Thekathyil* (NSW 999295).

NSW, **Vic.**, **Tas.**

Lejeunea wattsiana (Steph.) H.A.Mill., Bonner & Bischl.

≡ *Microlejeunea wattsiana* Steph.

Ref.: Grolle 1982 (tax., dist.)

NSW

Lepicolea Dumort.

Ref.: Engel & Glenny 2008 (tax.)

Lepicolea attenuata (Mitt.) Steph.

≡ *Sendtnera attenuata* Mitt.

Ref.: Engel & Glenny 2008 (tax.)

Herbarium voucher: Tasmania: F8 East Road, Growling Swallet and track to Growling Swallet, Mount Field National Park, 4 Dec. 2007, *M.A.M. Renner 3054* (NSW 1051679).

Lepicolea attenuata and *Lepicolea scolopendra* are readily differentiated, and misidentification seems unlikely, but it is unusual that *Lepicolea attenuata* has not been previously reported for Tasmania. The determination of our voucher specimen should be confirmed.

Tas.

Lepicolea rara (Steph.) Grolle

≡ *Lepidozia rara* Steph.

Herbarium voucher: Queensland: Thornton Peak, track to summit on western flank from Hilda Creek, on and in the immediate vicinity of the summit outcrop, Daintree National Park, 14 Aug. 2017, *M.A.M. Renner, A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys 8494* (NSW 1060928).

Lepidoclea rara is newly recorded for Australia based on recent collections from Thornton Peak, north east Queensland.

Qld

Lepicolea scolopendra (Hook.) Dumort. ex Trevis.

≡ *Jungermannia scolopendra* Hook.

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: New South Wales: S of Eden, S coast, 29 Oct. 1960, *R.D. Hoogland 7732* (NSW 567975).

Vic., Tas.

Lepidolaena Dumort.

Ref.: Crandall-Stotler et al. 2009b (tax.)

Lepidolaena brachyclada (Taylor ex Lehm.) Trevis.

≡ *Frullania brachyclada* Taylor ex Lehm.

= *Jungermannia brachyclada* Taylor ex Lehm., *nom. inval.*

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: Strzelecki Peak, Flinders Island, Nov. 1893, *J. Gabriel* (MEL 0019571A).

Tas.

Lepidolaena clavigera (Hook.) Dumort. ex Trevis.

≡ *Jungermannia clavigera* Hook.

Ref.: Engel & Glenny 2019b (tax., dist.)

Reported for Tasmania by Engel and Glenny (2019). Previously considered endemic to New Zealand (Grolle 1967).

Tas.

Lepidolaena fissistipula (Steph.) Grolle

≡ *Frullania fissistipula* Steph.

Herbarium voucher: Queensland: Mount Bartle Frere, centre peak, Wooroonooran National Park, 15 Jul. 2005, *E.A. Brown & M.A.M. Renner 2253* (NSW 1051471).

We reinstate *Lepidolaena fissistipula* as a distinct species from synonymy of *L. reticulata*, as *L. fissistipula* is distinguished from all other *Lepidolaena* by its elongate helms, and restricted occurrence in the Wet Tropics Bioregion of north-east Queensland.

Qld

Lepidolaena reticulata (Hook.f. & Taylor) Trevis.

≡ *Jungermannia reticulata* Hook.f. & Taylor

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: Wellington Falls, without date, *R.A. Bastow 339* (MEL 0019575A).

Records of *Lepidolaena reticulata* from the Wet Tropics Bioregion of north east Queensland are referable to *Lepidolaena fissistipula*.

Tas.

Lepidolaena taylorii (Gottsche) Trevis.

≡ *Polyotus taylorii* Gottsche

Ref.: Engel & Glenny 2019b (tax., dist.)

Vic., Tas., Norfolk I.

Lepidolejeunea R.M.Schust.

Lepidolejeunea bidentula (Steph.) R.M.Schust.

≡ *Pycnolejeunea bidentula* Steph.

= *Hygrolejeunea sayeri* Steph., *nom. inval.*

Herbarium voucher: Queensland: Bingil Bay near Mission Beach. Licuala Forest Park, Tam O'Shanter State Forest, 4 Sep. 1999, *T. Pócs & H. Streimann 99118/B* (NSW 895606).

Qld

Lepidolejeunea integristipula (J.B.Jack & Steph.) R.M.Schust.

≡ *Pycnolejeunea integristipula* J.B.Jack & Steph.

Ref.: Renner 2011 (dist.)

Herbarium voucher: Queensland: Daintree National Park, Myall Beach campground, 11 Jul. 2005, *E.A. Brown & M.A.M. Renner 2058* (NSW 1005883).

Qld

Lepidolejeunea queenslandica B.M.Thiers

≡ *Rectolejeunea queenslandica* (B.M.Thiers) X.-L.He

Herbarium voucher: Queensland: Tributary of Babinda Stream upstream of Goldfields track bridge, Wooroonooran National Park, 9 Sep. 2018, *M.A.M. Renner, L. Shu & R-L. Zhu 8899* (NSW 1052742).

Qld

Lepidozia (Dumort.) Dumort., *nom. cons.*

≡ *Pleuroschisma sect. Lepidozia* Dumort.

Ref.: Engel & Glenny 2008 (tax.)

Lepidozia appressifolia Steph.

= *Lepidozia appressifolia* f. *armata* Rodway

= *Lepidozia capillaris* var. *geniculata* Carrington & Pearson

Herbarium voucher: New South Wales: Blue Mountains, Katoomba Falls, 15 Jan. 1902, *W.W. Watts 571* (NSW 360405).

Lepidozia appressifolia may be a member of the *Lepidozia laevifolia* complex, or may belong to *Kurzia*. There is syntype material leg. *Watts* at NSW, and critical examination of original material is required as a first step to improving our knowledge of this taxon.

NSW, Tas.

Lepidozia buffalona Steph.

Herbarium voucher: New South Wales: Cutting, Pittwater Road, beyond Buffalo Creek, Gladesville, 17 Aug. 1910, *W.W. Watts 978* (NSW 260132).

The status of this taxon requires investigation.

NSW

Lepidozia chordulifera Taylor

Herbarium voucher: New South Wales: Fitzroy Falls, Moss Vale, Oct. 1900, *W. Forsyth 65* (NSW 260236).

Lepidozia chordulifera is a southern temperate American species, whose presence in Australia needs to be confirmed.

NSW, Tas.

Lepidozia communis Steph.

Ref.: Söderström et al. 2016 (tax.)

The status of this taxon requires investigation, critical examination of original material is a necessary first step to improving our knowledge.

NSW

Lepidozia concinna Colenso

Ref.: Engel & Glenny 2008 (tax., dist.)

Tas.

Lepidozia crassitexta Steph.

Ref.: Söderström et al. 2016 (tax.)

The status of this taxon requires investigation, critical examination of original material is a necessary first step to improving our knowledge.

NSW

Lepidozia digitata Herzog

Ref.: Engel & Glenny 2008 (tax.); Meagher 2008 (dist.)

Herbarium voucher: Tasmania: headwaters of Russell Falls Creek, Mount Field National Park, 2 Dec. 2007, *D.A. Meagher* (NSW 858098).

Tas.

Lepidozia eenii S.W.Arnell

Ref.: Söderström et al. 2016 (tax.)

Herbarium voucher: New South Wales: Base of Mount Warning, car park at end of road, 17 Jun. 2005, *E.A. Brown & M.A.M. Renner 1425* (NSW 998152).

Qld, NSW

Lepidozia glaucophylla (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

≡ *Jungermannia glaucophylla* Hook.f. & Taylor

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Cradle Mountain Lake St Clair National Park, Hugel River just W of SW end of Lake St Clair, 8 Feb. 1977, *J.J. Engel 14146* (NSW 611215).

NSW, Vic., Tas.

Lepidozia gracillima Carrington & Pearson

Herbarium voucher: New South Wales: Botany Bay, Jun. 1885, *T.W. Whitelegge 24* (NSW 360435).

The status of this taxon requires investigation, critical examination of original material is a necessary first step to improving our knowledge.

NSW

Lepidozia hasskarliana Steph.

≡ *Lepidozia supradecomposita* var. *hasskarliana* Gottsche, Lindenb. & Nees

Herbarium voucher: Queensland: Mt Finnigan, on and flanks of the summit, Cedar Bay National Park, 8 Jun. 2017, *M.A.M. Renner, H. Hancock, T. Houghton, L. Roberts, A. Rouse & S. Worboys 7989* (NSW 1060477).

New record for Australia based on recent collections from Mt Finnigan and Thornton Peak in north-east Queensland.

Qld

Lepidozia hastatistipula Steph.

Herbarium voucher: Victoria: 'Airlee', (by Summer House), Healesville, Dec. 1906, *W.W. Watts 966* (MEL 0068188A).

The status of this taxon requires investigation, critical examination of original material is a necessary first step to improving our knowledge.

Vic.

Lepidozia laevifolia (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

≡ *Jungermannia laevifolia* Hook.f. & Taylor

Ref.: Engel & Glenny 2008 (tax., dist.)

The name *Lepidozia laevifolia* is widely applied to a range of small stature morphotypes with papillose leaves. *Lepidozia laevifolia* is almost certainly a complex of related but distinct taxa in both Australia and New Zealand, and this complex requires detailed investigation.

Lepidozia laevifolia var. **laevifolia**

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Vale of Belvoir, 13 Mar. 2010, *L.H. Cave 1083* (HO 556362).

Qld, NSW, Vic., Tas. Lord Howe I.

Lepidozia microstipula Steph.

Herbarium voucher: New South Wales: Lane Cove River, Nov. 1910, *W.W. Watts 958* (NSW 360444).

The status of this taxon requires investigation, critical examination of original material is a necessary first step to improving our knowledge.

NSW

Lepidozia montana Steph.

The status of this taxon requires investigation, critical examination of original material is a necessary first step to improving our knowledge.

NSW

Lepidozia nova Steph.

Herbarium voucher: New South Wales: Track from Horse Shoe [Horseshoe] Falls to Jungle, Blackheath, Jan. 1911, *W.W. Watts 1033* (NSW 361232).

The status of this taxon requires investigation, critical examination of original material is a necessary first step to improving our knowledge.

NSW, Vic., Tas.

Lepidozia obtusiloba Steph.

Ref.: Engel & Glenny 2008 (tax.)

Lepidozia obtusiloba var. **obtusiloba**

Herbarium voucher: Tasmania: Hartz Mountains. Dry Creek [?]1, without date, *E.D. Cooper 113* (NSW870801).

The name *Lepidozia obtusiloba* is widely applied to plants from eastern Australia, including the Wet Tropics of Queensland and Tasmania, but this is possibly inappropriate. The distribution of this species in Australia needs further study.

NSW, **Vic.**, **Tas.**, **Macquarie I.**

Lepidozia parvistipa Taylor

Herbarium voucher: Western Australia: Swan River, without date, *J. Drummond* (MEL 0068161A).

The status of this taxon requires investigation, critical examination of original material is a necessary first step to improving our knowledge.

WA

Lepidozia pendulina (Hook.) Lindenb.

≡ *Jungermannia pendulina* Hook.

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Mt Wedge, forest track, 5 Mar. 1978, *A.V. Ratkowsky H1518* (HO 303316).

Vic., **Tas.**

Lepidozia procera Mitt.

= *Lepidozia parvitexta* Steph.

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Skullbone Plains, Kenneth Lagoon, 28 Feb. 2012, *L.H. Cave 1474* (HO 565991).

The name *Lepidozia procera* is applied to a complex of wiry-stemmed *Lepidozia* with asymmetric, small, tightly appressed leaves. Plants from the Wet Tropics differ from those in NSW, Vic and Tasmania in their smaller stature contiguous leaves on primary shoots, and predominantly pinnate branching. Within Tasmania this name encompasses at least two morphotypes, one of which possesses *Acromastigum*-type branching, an unusual feature within *Lepidozia*. This entity has been confused with *Lepidozia microphylla*.

Qld, **NSW**, **Vic.**, **Tas.**

Lepidozia quadrifida Kunze ex Lindenb.

Herbarium voucher: New South Wales: Gordon Gully - to right of Pine / Line [?] from ...[?] Point, *W.W. Watts & S. Willidens 612* (NSW 262071).

The status of this taxon requires investigation, critical examination of original material is a necessary first step to improving our knowledge.

NSW, **Vic.**, **Tas.**

Lepidozia septemfida Steph.

= *Lepidozia multifida* Steph.

Ref.: Cooper et al. 2013 (tax.)

Herbarium voucher: Victoria: Triplet Falls, 1 Nov. 2007, *E.D. Cooper 76* (NSW 857468).

NSW, **Vic.**, **Tas.**

Lepidozia terricola Steph.

Herbarium voucher: New South Wales: Belmore Falls, 5 Oct. 1908, *W.W. Watts 935* (NSW 262095).

The status of this taxon requires investigation, critical examination of original material is a necessary first step to improving our knowledge.

NSW

Lepidozia ulothrix (Schwägr.) Lindenb.

= *Jungermannia albula* Hook.f. & Taylor

≡ *Jungermannia ulothrix* Schwägr.

Ref.: Engel & Glenny 2008 (tax., dist.)

The name *Lepidozia ulotrix* has been widely applied in Australia to *Lepidozia* with serrate dorsal leaf lobe margins. On mainland Australia, most, if not all reports of *Lepidozia ulothrix* are based on *Lepidozia septemfida*, a species recently reinstated from synonymy by Cooper et al. (2013). Plants named *Lepidozia ulotrhix* from the Wet Tropics of Queensland are part of the *Lepidozia ulothrix* complex, but represent a morphologically distinct, possibly undescribed, species. Within Tasmania there appear to be two forms encompassed under this name, one of which is more similar to, and may be, *Lepidozia serrulata* (see Cooper et al. 2012), but more investigation of these plants and their relationships is required.

Tas.

Lepidozia wattsiana Steph.

Herbarium voucher: New South Wales: Gully near station, Stanwell Park, without date, *W.W. Watts Hepat 837* (NSW 262160).

The status of this taxon requires investigation, critical examination of original material is a necessary first step to improving our knowledge.

NSW

Lepidozia weymouthiana Steph.

Herbarium voucher: Tasmania: Mt Field, Jan. 1900, *L. Rodway* (HO 61054).

The status of this taxon requires investigation, critical examination of original material is a necessary first step to improving our knowledge.

Tas.

Leptolejeunea (Spruce) Schiffn.

≡ *Lejeunea* subg. *Leptolejeunea* Spruce

Leptolejeunea australis Steph.

Ref.: Shu et al. 2021 (tax., dist.)

Qld, **NSW**

Leptolejeunea denticulata Steph.

The original material is from 'Bellenden Ker Montes', but no specimens have been examined and the taxon remains poorly known.

Qld

Leptolejeunea epiphylla (Mitt.) Steph.

≡ *Lejeunea epiphylla* Mitt.

Ref.: Shu et al. 2021 (tax.)

Herbarium voucher: Queensland: Goldsborough State Forest Park, 17 km S of junction of Goldsborough Road and Gillies Highway, 5 Jul. 1984, *B.M. Thiers 2139* (CBG 9909478.1).

Widespread in Malesia, and present in Papua New Guinea and New Caledonia, reported for Australia and these reports are tentatively accepted here.

Qld

Leptolejeunea maculata (Mitt.) Schiffn.

≡ *Lejeunea maculata* Mitt.

Ref.: Shu et al. 2021 (tax., dist.)

Herbarium voucher: Queensland: Goldsborough State Forest Park, 17 km S of junction of Goldsborough Road and Gillies Highway, 5 Jul. 1984, *B.M. Thiers 2137* (CBG 9909476.1).

Qld, **NSW**

Leptolejeunea picta Herzog

The status of *Leptolejeunea picta* in Australia is unresolved.

?Austr.

Leptolejeunea rhombifolia Steph.

Herbarium voucher: Queensland: Main Coast Range, Windmill Creek, 14 km NNW of Mount Molloy, 30 Jun. 1984, *H. Streimann 30437A* (CANB 601164.1).

Qld

Leptolejeunea rosulans Steph.

Ref.: Shu et al. 2021 (tax., dist.)

Herbarium voucher: Queensland: Rocky Creek, 4 km NNE of Nambour, 4 Apr. 1993, *H. Streimann 52847* (CBG 9316831.1).

Qld, **NSW**

Leptolejeunea schiffneri (Steph. ex Schiffn.) Steph.

≡ *Lejeunea schiffneri* Steph. ex Schiffn.

Ref.: Shu et al. 2021 (tax., dist.)

Herbarium voucher: Queensland: Atherton Tablelands, PEI Road, North Johnston River Logging Area, off Glen Allyn Road, 2 Jul. 2005, *D.C. Cargill 849* (CANB 791101.1).

Qld

Leptolejeunea subrotundifolia Herzog

Ref.: Shu et al. 2021 (tax., dist.)

Herbarium voucher: Northern Territory: Melville Island, Tarracumbie Falls, 25 Apr. 1989, *J.A. Curnow 3042* (CBG 9310219.1).

Resurrected from synonymy of *Leptolejeunea maculata* sensu lato, which was resolved as polyphyletic (Shu et al. 2021).

Qld

Leptophyllopsis R.M.Schust.

Ref.: Engel & Glenny 2019a (tax.)

Leptophyllopsis laxa (Mitt.) R.M.Schust.

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: Victoria: Big River road, stream to north of road, Errinundra National Park, 5 Apr. 2011, *M.A.M. Renner & E.A. Brown 5207* (NSW 998201)

NSW, **ACT**, **Vic.**, **Tas.**

Leptoscyphus Mitt.

Leptoscyphus australis (Gottsche, Lindenb. & Nees) R.M.Schust.

≡ *Chiloscyphus australis* Gottsche, Lindenb. & Nees

= *Lophocolea novae-zeelandiae* f. *varians* Gottsche

= *Lophocolea hodgsoniae* Hamlin

Jungermannia australis Hook.f. & Taylor, *nom. illeg.*

Lophocolea australis (Hook.f. &Taylor) Mitt., *nom. illeg.*

Ref.: Engel & Glenny 2019a (tax., dist.)

Engel & Glenny (2019a) indicated they had seen specimens from Tasmania and referenced McCarthy (2006) as the source of Victorian and New South Wales specimens.

Tas.

Leptoscyphus compactus (Colenso) J.J.Engel

≡ *Chiloscyphus compactus* Colenso

Ref.: Engel & Glenny 2019a (tax.); Engel 2016 (dist.)

Reported distribution as: Australia, Tasmania (new) by Engel (2016) without citation of a supporting voucher. We accept this report here.

Tas.

Leptoscyphus excipulatus (Steph.) J.J.Engel

≡ *Lophocolea excipulata* Steph.

Ref.: Engel 2016 (tax.)

Leptoscyphus excipulatus var. **canaliculatus** J.J.Engel

Ref.: Engel 2016 (tax.); Engel & Glenny 2019a (dist.)

Tas.

Leptoscyphus excipulatus var. **excipulatus**

= *Lophocolea belmorana* Steph.

Leptoscyphus belmoranus (Steph.) J.J.Engel

Ref.: Engel 2016 (tax., dist.)

Reported distribution as 'Australia: Tasmania, New South Wales (new)' without citation of supporting voucher. We accept this report here.

NSW, **Tas.**

Leptoscyphus heterophyllus (Steph.) J.J.Engel

≡ *Chiloscyphus heterophyllus* Steph.

Heteroscyphus heterophyllus (Steph.) J.J.Engel & R.M.Schust.

Ref.: Engel & Glenny 2019a (tax.); Engel 2016 (dist.)

Tas.

Leptoscyphus idiodontus J.J.Engel

Ref.: Engel & Glenny 2019a (tax., dist.)

Tas.

Leptoscyphus incomptus J.J.Engel

= *Lophocolea excipulata* f. *humilior* Rodway

= *Lophocolea exipulata* f. *minor* Rodway

Ref.: Engel & Glenny 2019a (tax., dist.)

Tas.

Leptoscyphus microphyllidicus J.J.Engel

Ref.: Engel & Glenny 2019a (tax.); Engel 2016 (dist.)

Herbarium voucher: *Seppelt 10433* (F)

Macquarie I.

Lethocolea Mitt., *nom. cons.*

Lethocolea pansa (Taylor) G.A.M.Scott & K.G.Beckm.

≡ *Jungermannia pansa* Taylor

= *Podanthe squamata* Taylor

= *Gymnanthe drummondii* Mitt., *nom. illeg.*

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: New South Wales: Agnes Banks, 5 km SW of Richmond, 29 Jul. 1992, *R.G. Coveny & A. Gunnell 16236* (NSW786564).

WA, **SA**, **Qld**, **NSW**, **ACT**, **Vic.**, **Tas.**

Lobatiriccardia (Mizut. & S.Hatt.) Furuki

≡ *Riccardia* subg. *Lobatiriccardia* Mizut. & S.Hatt.

Ref.: Furuki 1991 (tax.)

Lobatiriccardia alterniloba (Hook.f. & Taylor) Furuki

≡ *Jungermannia alterniloba* Hook.f. & Taylor

Aneura alterniloba (Hook.f. & Taylor) Taylor & Hook.f.

Ref.: Furuki 1991 (tax.)

Lobatiriccardia alterniloba var. **gigantea** (Steph.) Nebel

≡ *Aneura gigantea* Steph.

Aneura alterniloba var. *gigantea* (Steph.) Hewson

Ref.: Nebel et al. 2013 (tax.)

Herbarium voucher: *Hewson 847* (SYD).

NSW, **Tas.**

Lobatiriccardia alterniloba var. **robusta** (Rodway) Nebel

≡ *Aneura alterniloba* var. *robusta* (Rodway) Hewson

Aneura alterniloba f. *robusta* Rodway

Ref.: Nebel et al. 2013 (tax.)

Herbarium voucher: *Hewson 254* (SYD).

Vic., **Tas.**

Lobatiriccardia athertonensis (Hewson) Furuki

≡ *Aneura athertonensis* Hewson

Ref.: Furuki 1991 (tax.)

Herbarium voucher: Queensland: Charmillin Creek, 22 Aug. 1964, *H.J. Hewson H6471425* (BRI AQ0722029).

Qld

Lopholejeunea (Spruce) Steph., *nom. cons.*

≡ *Lejeunea* subg. *Lopholejeunea* Spruce

Ref.: Söderström et al. 2015 (tax.)

Lopholejeunea eulopha (Taylor) Schiffn.

≡ *Lejeunea eulopha* Taylor

Phragmicoma eulopha (Taylor) Mitt.

= *Lopholejeunea norfolkiensis* Steph.

= *Lejeunea fimbriata* Gottsche

Lopholejeunea fimbriata (Gottsche) Schiffn.

Ref.: Thiers & Gradstein 1989 (tax., dist.)

Herbarium voucher: Queensland: Dunn Creek, Kirrima Road, Cardwell Range, 23 WNW of Cardwell, 8 Jul. 1984, *H. Streimann 31254* (CANB 551220.1).

Qld, **NSW**, **Norfolk I.**

Lopholejeunea grossealata Steph.

Lopholejeunea grossealata was treated as a synonym of *Lopholejeunea plicatiscypha* by Thiers & Gradstein (1989). Our investigation of specimens and type material reveals that *L. plicatiscypha* is a New Zealand endemic, being confined to rheophytic habitats in the upper North Island. *Lopholejeunea knightii* Steph., another species also treated as a synonym of *L. plicatiscypha* by Thiers & Gradstein (1989) represents another distinct New Zealand endemic species. The name *Lopholejeunea grossealata* is available for plants to which the name *L. plicatiscypha* has been applied in Australia, and we accept this species here. The genus *Lopholejeunea* requires further study in both Australia and New Zealand.

Qld, **NSW**

Lopholejeunea herzogiana Verd.

Ref.: Zhu & Gradstein 2005 (tax.)

Herbarium voucher: Queensland: Thornton Peak, track to summit from Hilda Creek, on summit plateau, Daintree National Park, 17 Aug. 2017, *M.A.M. Renner, A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys 8585* (NSW 1061107).

Lopholejeunea herzogiana is a new record for Australia, based on two recent collections from Mt Finnigan in the Wet Tropics Bioregion of north-east Queensland.

Qld

Lopholejeunea hispidissima Steph.

Ref.: Thiers & Gradstein 1989 (tax., dist.)

Herbarium voucher: Queensland: Noosa Heads, 2 Aug. 1984, *B.M. Thiers 2881* (BRI AQ0538851).

Qld

Lopholejeunea javanica (Nees) Schiffn.

≡ *Lejeunea javanica* Nees

Herbarium voucher: Queensland: Conway State Forest, 16 km ENE of Proserpine, 28 Jun. 1986, *J.A. Curnow 1063* (CBG 9709348.1).

Lopholejeunea javanica is a new record for Australia, based on specimens from north-east Queensland determined by R.L. Zhu.

Qld

Lopholejeunea loheri Steph.

Ref.: Thiers & Gradstein 1989 (tax.)

Herbarium voucher: Queensland: Barron State Forest, Herberton Range, 11 km SSW of Atherton, 2 Mar. 1983, *H. Streimann 27266*, *p.p.* (CBG 8304167.1).

Qld, **NSW**

Lopholejeunea muelleriana (Gottsche) Schiffn.

Ref.: Thiers & Gradstein 1989 (tax.)

Lopholejeunea muelleriana var. **australis** (Steph.) B.M.Thiers & Gradst.

≡ *Lopholejeunea australis* Steph.

Ref.: Thiers & Gradstein 1989 (tax., dist.)

Herbarium voucher: New South Wales: Brindle Creek, Wiangaree State Forest, 27 km NNE of Kyogle, 3 Sep. 1978, *H. Streimann 6027* (CBG 7900274.1).

Qld, **NSW**, **Christmas I.**, **Lord Howe I.**

Lopholejeunea muelleriana var. **muelleriana**

Ref.: Thiers & Gradstein 1989 (tax., dist.)

Herbarium voucher: Queensland: Waterview Falls [=Jourama Falls?], Jourama National Park, 27 Jun. 2005, *E.A. Brown & M.A.M. Renner 1600* (NSW 1005060).

Qld, **NSW**

Lopholejeunea nigricans (Lindenb.) Schiffn.

≡ *Lejeunea nigricans* Lindenb.

Ref.: Zhu & Gradstein 2005 (tax., dist.)

Herbarium voucher: New South Wales: The Coast Range, Waihoo State Forest, Sherwood Road, 19 km NNW of Coffs Harbour, 19 Apr. 1998, *J.A. Curnow* 5106 (CANB 604033.1).

Qld, **NSW**, **Christmas I.**

Lopholejeunea streimannii B.M.Thiers & Gradst.

Ref.: Thiers & Gradstein 1989 (tax., dist.)

Herbarium voucher: Queensland: Barron State Forest, Herberton Range, 13 km S of Atherton, 2 Mar. 1983, *H. Streimann* 27212 (CBG 8303013.1).

Qld

Lopholejeunea subfusca (Nees) Schiffn.

≡ *Jungermannia subfusca* Nees

Lejeunea subfusca (Nees) Nees & Mont.

Symbiezidium subfuscum (Nees) Trevis.

Ref.: Thiers & Gradstein 1989 (tax., dist.)

Qld, **NSW**, **Lord Howe I.**

Lunularia Adans.

Ref.: Crandall-Stotler et al. 2009b (tax.)

Lunularia cruciata (L.) Dumort.

≡ *Marchantia cruciata* L.

= *Lunularia vulgaris* Micheli ex Raddi, *nom. illeg.*

Herbarium voucher: New South Wales: Mount Druitt, 29 Mar. 1989, *E.A. Brown, R.G. Coveny & P.D. Hind 13035* (NSW 457716).

SA, **Qld**, **NSW**, **ACT**, **Vic.**, **Tas.**, **Lord Howe I.**

Marchantia L.

Ref.: Crandall-Stotler et al. 2009b (tax.)

Marchantia berteroana Lehm. & Lindenb.

= *Marchantia tabularis* Nees

= *Marchantia paludicola* Steph.

= *Marchantia cephaloscypha* Steph.

Herbarium voucher: New South Wales: Kosciuszko National Park, The Rams Head Range, Merritts Spur, below Easy Rider, 13 Jan. 2002, *J.A. Curnow 5639* (CANB 636816.1).

WA, **NT**, **SA**, **ACT**, **Vic.**, **Tas.**, **Lord Howe I.**

Marchantia foliacea Mitt.

= *Marchantia fusca* Steph.

= *Marchantia tasmanica* Steph. ex Bonner

Herbarium voucher: Queensland: Quandong Creek, 3 Jul. 2014, *D.C. Cargill 972QLD* (CANB 900953.1).

WA, **SA**, **Qld**, **NSW**, **ACT**, **Vic.**, **Tas.**

Marchantia pileata Mitt.

= *Marchantia wattsiana* Steph. ex Bonner

= *Marchantia pallida* Steph.

Herbarium voucher: Victoria: Errinundra River, junction of Errinundra Road and Helmers Track, 28 km S of Bendoc, 30 Mar. 1988, *J.A. Curnow 1797* (CBG 8805924.1).

WA, **SA**, **Qld**, **NSW**, **Vic.**, **Tas.**, **Lord Howe I.**

Marchantia polymorpha L.

Herbarium voucher: Australian Capital Territory: Botanic Gardens, Canberra, 10 Feb. 1977, *H. Streimann 4506* (CBG 67089.1).

SA, Qld, NSW, ACT, Vic., Tas.

Marchantia quadrata Scopoli

= *Preissia commutata* (Lindenb.) Nees

= *Marchantia commutata* Lindenb.

Ref.: McCarthy 2003 (dist.)

Marchantia quadrata (as *Priessia commutata*), was included for the state of NSW by McCarthy (2003). We have been unable to corroborate the record but consider it doubtful.

?NSW

Marsupella Dumort.

Ref.: Shaw et al. 2015 (tax.)

Marsupella sparsifolia (Lindb.) Dumort.

≡ *Sarcoscyphus sparsifolium* Lindb.

Ref.: Engel & Glenny 2008 (tax.)

Marsupella sparsifolia subsp. **childii** R.M.Schust. ex Váňa & L. Söderstr.

Ref.: Váňa et al. 2014 (tax.)

Herbarium voucher: Victoria: Stony Creek, Wonderland, Grampians National Park, 3 Jul. 1998, *A.J. Downing s.n.* (NSW 909408)

Engel & Glenny (2008) listed *Marsupella sparsiflora* subsp. *childii* as endemic to New Zealand, evidently overlooking the occurrence in Australia of this southern temperate subspecies.

NSW, **Vic.**, **Tas.**

Mastigophora Nees, *nom. cons.*

Ref.: Crandall-Stotler et al. 2009b (tax.)

Mastigophora diclados (Brid. ex F.Weber) Nees

≡ *Jungermannia diclados* Brid. ex F.Weber

Herbarium voucher: New South Wales: Best of all Lookout, 26 km SSW of Coolangatta (NSW side of ridge), 31 Jul. 1998, *H. Streimann 61918* (CBG 9911556.1).

Qld, **NSW**

Megaceros Campb.

Megaceros austronesophilus Cargill & Seppelt

Herbarium voucher: Tasmania: South West Conservation Area. Huon River, adjacent Huon campground, 23 Jan. 2012, *M.A.M. Renner 5943* (CANB 865502.1).

Tas., **Macquarie I.**

Megaceros flagellaris (Mitt.) Steph.

≡ *Anthoceros flagellaris* Mitt.

Ref.: Hasegawa 1983 (tax.)

Herbarium voucher: Queensland: [Crater Lakes] National Park, Lake Eacham. Wrights Creek, on Wrights Creek road, at edge of creek, 6 Jul. 2005, *D.C. Cargill 885* (CANB 898986.1).

Qld

Megaceros gracilis (Reichardt) Steph.

≡ *Anthoceros gracilis* Reichardt

= *Megaceros crassus* Steph.

= *Anthoceros carnosus* Steph.

Megaceros carnosus (Steph.) Steph.

= *Anthoceros longispirus* Carrington & Pearson

Ref.: Cargill et al. 2013a (tax., dist.)

Herbarium voucher: New South Wales: Monga State Forest, 24 km SE of Braidwood, 29 Sept. 1991, *J.A. Curnow 4205* (CANB 9501593).

Qld, **NSW**, **ACT**, **Vic.**, **Tas.**, **Lord Howe I.**

Metalejeunea Grolle

Metalejeunea cucullata (Reinw., Blume & Nees) Grolle

≡ *Jungermannia cucullata* Reinw., Blume & Nees

Lejeunea cucullata (Reinw., Blume & Nees) Nees

Ref.: Bechteler et al. 2016 (tax.); Grolle 1982 (dist.)

Herbarium voucher: Queensland: Track to Mt Finnigan, Mt Finnigan Range, 39 km S of Cooktown, 20 Oct. 1995, *H. Streimann 57261* (CBG 9606146.1).

Metalejeunea cucullata is a complex that requires further investigation (Bechteler et al. 2016).

Qld, **NSW**, **Tas.**

Metzgeria Raddi

Metzgeria australis Steph.

Ref.: Bechteler et al. 2021 (tax., dist.)

Part of the polyphyletic *Metzgeria furcata* in Bechteler et al. (2021), but a synonym of *M. leptoneura* in So (2002). Confusion between these two species, given the presence or absence of paired marginal hairs, should not be possible.

WA, **SA**, **Qld**, **NSW**, **ACT**, **Vic.**, **Tas.**

Metzgeria consanguinea Schiffn.

Ref.: So 2002a (tax.)

Herbarium voucher: Victoria: 4 Oct. 2003 (CHR 580106).

WA, **Vic.**

Metzgeria crassipilis (Lindb.) A.Evans

≡ *Metzgeria furcata subsp. crassipilis* Lindb.

Ref.: So 2002a (tax.)

Herbarium voucher: New South Wales: Vandenbergh Road, 4 km E of Robertson, off Jamberoo Road, 17 Sep. 1980, *H. Streimann 10481* (CBG 8006783.1).

NSW, **Vic.**

Metzgeria densiseta Steph.

Ref.: Bechteler et al. 2021 (tax.)

Herbarium voucher: New South Wales: Near steps on weeping rock track, Point Lookout, New England National Park, 10 Mar. 1990, *A.K. Brooks & E.A. Brown 259* (NSW 227174).

A specimen representative of *Metzgeria densiseta* was included by Bechteler et al. (2021) and resolved with *M. quadriseriata* sister to *M. flavovirens*. This is interpreted here as support for the recognition of *Metzgeria densiseta*.

Qld, **NSW**, **Vic.**, **Tas.**

Metzgeria flavovirens Colenso

Ref: Váňa et al. 2015 (tax., dist.)

Herbarium voucher: Macquarie Island, *Seppelt 9906* (ADT).

Macquarie I.

Metzgeria franciana Steph.

Ref.: Thouvenot 2018 (tax.)

Herbarium voucher: Queensland: Thornton Peak, track to summit on western flank from Hilda Creek, on summit plateau, Daintree National Park, 14 Aug. 2017, *M.A.M. Renner, A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys 8531* (NSW 1061009).

Metzgeria franciana is newly reported for Australia based on collections from the Wet Tropics Bioregion of north-east Queensland. Previously confused with *Metzgeria saccata*, which is also present in Australia. The species epithet was published as 'francana', which is correctible to 'franciana' in accordance with Art. 60.8(d).

Qld

Metzgeria furcata (L.) Dumort.

≡ *Jungermannia furcata* L.

= *Metzgeria furcata var. decipiens* C.Massal.
Metzgeria decipiens (C.Massal.) Schiffn.

= *Metzgeria grollei* Kuwah.

= *Metzgeria glaberrima* Steph.

= *Metzgeria pinnata* Steph.

Ref.: Bechteler et al. 2021 (tax.)

Metzgeria furcata was resolved polyphyletic by Bechteler et al. (2021), who referred Australasian samples to *M. australis* and *M. howeana*. The presence of *M. furcata* s.s. in Australia remains to be resolved, but on molecular evidence published to date it is unlikely that *Metzgeria furcata* does occur in Australia. However, we feel it premature to definitely exclude *Metzgeria furcata* until dedicated study of the genus *Metzgeria* in Australia is completed, and so we retain it in the census.

WA, **SA**, **Qld**, **NSW**, **ACT**, **Vic.**, **Tas.**

Metzgeria hebridensis Steph.

Ref.: So 2002a (tax.); Meagher 2003 (dist.)

Herbarium voucher: (MUCV 6751).

Qld

Metzgeria howeana Steph.

Ref.: Bechteler et al. 2021 (tax.)

Herbarium voucher: New South Wales: Yarrawa, Mt Wilson, 11 Jan. 1911, *W.W. Watts 1065* (NSW 251850).

One of six lineages of a polyphyletic *M. furcata* sens. lat. recovered by Bechteler et al. (2021).

NSW, **Lord Howe I.**

Metzgeria leptoneura Spruce

= *Metzgeria colensoi* Steph.

= *Metzgeria concavula* Pearson

= *Metzgeria atrichoneura* Spruce

= *Metzgeria hamata* Lindb.

= *Metzgeria antarctica* Steph. & Watts, *nom. inval.*

Ref.: So 2002a (tax.)

Herbarium voucher: New South Wales: Hastings Forest Way, between Camp Spur track and Camerons Camp, 56 km NW of Port Macquarie, 18 Jun. 1999, *H. Streimann 63854* (CANB 604847.1).

Qld, **NSW**, **ACT**, **Vic.**, **Tas.**, **Lord Howe I.**, **Norfolk I.**

Metzgeria lindbergii Schiffn.

= *Metzgeria pectinata* Steph.

Ref.: So 2002a (tax.)

Qld, **NSW**, **Vic.**, **Lord Howe I.**, **Norfolk I.**

Metzgeria nitida Mitt.

Ref.: Bechteler et al. 2021 (tax.)

Metzgeria nitida from New Zealand was resolved sister to *M. scobina* and other species with full support in Bechteler et al. (2021), and not with *M. leptoneura*. Papua New Guinean *M. nitida* were not closely related to the New Zealand accession. The distribution of this species is taken from identified herbarium specimens. The lectotype is from Victoria.

NSW, **Vic.**, **Tas.**, **Lord Howe I.**

Metzgeria rigida Lindb.

= *Metzgeria crassicostata* Steph.

= *Metzgeria wattsiana* Steph.

Ref.: So 2002a (tax.)

Herbarium voucher: Queensland: Cave Creek Rainforest Rehabilitation Scheme, lot 1 on RP187885, Natural Bridge. Approximately 1.4 km along track from entrance to property, 20 Jan. 2018, *A.J. Franks & L. Weber AJF1801024E* (BRI AQ0826878).

Qld, **NSW**, **Vic.**, **Tas.**

Metzgeria saccata Mitt.

Ref.: So 2002a (tax.)

Herbarium voucher: New South Wales: Moppy Lookout, Barrington Tops State Forest, 40 km WNW of Gloucester, 26 Apr. 1990, *H. Streimann 44437* (CBG 9008861.1).

Also reported for Western Australia, but the identification on the Western Australian specimen has not been confirmed.

NSW, **Vic.**, **Tas.**

Metzgeria submarginata M.L.So

Ref.: So 2002a (tax.)

Herbarium voucher: Tasmania: Cradle Mountain, Dec. 1916, without collector (HO 86317).

In New Zealand at least, this species comprises two distinct lineages (Bechteler et al. 2021) whose relationships warrant further investigation.

Vic., **Tas.**

Microlejeunea (Spruce) Steph.

≡ *Lejeunea* subg. *Microlejeunea* Spruce

Ref.: Dong et al. 2013 (tax.)

Reinstated from synonymy of *Lejeunea* by Dong et al. (2013). *Microlejeunea* species can be distinguished from *Lejeunea* by possession of 3 medullar cell rows in the stem, large lobules relative to lobe size, presence of ocelli or 'sub-ocelli' (larger cells full of numerous oil-bodies) usually in a group at the base of the leaf lobe, and possibly by the 3+2 elater formula of the capsule, though sporophytes have been examined for few species.

Microlejeunea bischlerae (B.M.Thiers) B.M.Thiers

≡ *Lejeunea bischlerae* B.M.Thiers

Ref.: Thiers 1997 (dist.)

Herbarium voucher: New South Wales: Border Ranges, Tweed Ranges Road, unnamed lookout, Border Ranges National Park, 19 Jun. 2005, *E.A. Brown & M.A.M. Renner 1500b* (NSW 866036).

Qld, **NSW**

Microlejeunea filicuspis (Steph.) Heinrichs, Schäf.-Verw., Pócs & S.Dong

≡ *Drepanolejeunea filicuspis* Steph.

Harpalejeunea filicuspis (Steph.) Mizut.

Ref.: Dong et al. 2013 (tax.)

Herbarium voucher: New South Wales: Mount Matheson, Mount Matheson Loop track, Nightcap National Park, 18 Jun. 2005, *E.A. Brown & M.A.M. Renner 1485h* (NSW 866015).

Qld, **NSW**

Microlejeunea latitans (Hook.f. & Taylor) Heinrichs, Schäf.-Verw., Pócs & S.Dong

≡ *Jungermannia latitans* Hook.f. & Taylor

Lejeunea latitans (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

Harpalejeunea latitans (Hook.f. & Taylor) Grolle

Ref.: Dong et al. 2013 (tax.)

Herbarium voucher: Tasmania: Blue Tier, 8 Dec. 2012, *T. Thekathyil 131* (NSW 999289).

Queensland records of this species should be critically compared with *Microlejeunea filicuspis*.

NSW, **Vic.**, **Tas.**

Microlejeunea punctiformis (Taylor) Steph.

≡ *Lejeunea punctiformis* Taylor

Ref.: Thiers 1990 (dist.)

Reported as an upland species by Thiers (1990), as *Lejeunea punctiformis*.

Qld

Microlejeunea spinosa (Mizut.) Grolle

≡ *Harpalejeunea spinosa* Mizut.

Ref.: Dong et al. 2013 (tax.)

Herbarium voucher: Queensland: Mt Tyson, 2 km WNW of Tully, 2 Dec. 1990, *J.A. Curnow 3697* (CBG 9408784.1).

Qld

Microlejeunea ulicina (Taylor) Steph.

≡ *Jungermannia ulicina* Taylor

= *Lejeunea gracillima* Mitt.

Ref.: Dong et al. 2013 (tax.)

Herbarium voucher: New South Wales: Orara East State Forest, between Nana Glen and Coramba, 24 Jan. 1998, *B.R. Myall* (CBG 9909295.1).

Qld, **NSW**

Microlejeunea wallichiana (Lehm.) R.L.Zhu & Y.M.Wei

≡ *Jungermannia wallichiana* Lehm.

Lejeunea wallichiana (Lehm.) Lehm.

Ref.: Wei & Zhu 2013 (tax.)

Microlejeunea wallichiana was included by Bolin & Henderson (2002) in their census of Queensland plants, but no substantiating Australian specimens have been located.

?Austr.

Mnioloma Herzog

Mnioloma fuscum (Lehm.) R.M.Schust.

≡ *Jungermannia fusca* Lehm.

Ref.: Renner & Brown 2008 (tax., dist.)

Herbarium voucher: Queensland: Mount Bartle Frere, Wooroonooran National Park, without date, *E.A. Brown & M.A.M. Renner 2219* (NSW 760046).

Qld

Mnioloma stamatotonum M.A.M.Renner & E.A.Br.

Ref.: Renner & Brown 2008 (tax., dist.)

Herbarium voucher: Queensland: Mount Lewis, 2005, *M.A.M. Renner 2139* (NSW 760047).

Mnioloma stamatotonum was confused with *Mnioloma novae-zelandiae* by Renner & Braggins (2006). *Mnioloma novae-zelandiae* is endemic to New Zealand.

Qld

Monocarpus D.J.Carr

Monocarpus sphaerocarpus D.J.Carr

Ref.: Carr 1956 (tax.)

Herbarium voucher: Victoria: Lake Duchembegarra Flora and Fauna Reserve, via Cooack Road, 16 Aug. 2015, *J. Milne & S.J. Milne 611* (MEL 2384845A).

SA, **Vic.**, **WA**

Myriocoleopsis Schiffn.

Ref.: Yu et al. 2014 (tax.)

Myriocoleopsis minutissima (Sm.) R.L.Zhu, Y.Yu & Pócs

≡ *Jungermannia minutissima* Sm.

Cololejeunea minutissima (Sm.) Schiffn.

Ref.: Yu et al. 2014 (tax.)

Herbarium voucher: New South Wales: Road to Bird Tree, Middle Brother National Park, 6 Sep. 2018, *M.A.M. Renner, L. Shu & R-L. Zhu 8779* (NSW 1053582).

NT, **Qld**, **NSW**

Neogrollea E.A.Hodgs.

Neogrollea notabilis E.A.Hodgs.

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Denniston Road, 1.7 km from T junction (8.3 km from junction with Neighbours Road and 9.2 km from main road), *E.A. Brown 2002/345* (NSW493345).

Tas.

Neolepidozia Fulford & J.Taylor

Ref.: Cooper 2013 (tax.)

Neolepidozia capilligera (Schwägr.) Fulford & J.Taylor

≡ *Jungermannia capilligera* Schwägr.

Telaranea capilligera (Schwägr.) R.M.Schust.

Ref.: Cooper 2013 (tax.); Engel & Smith Merrill 2004 (dist.)

Herbarium voucher: Tasmania: Growling Swallet, Mount Field National Park, without date, *E.A. Brown* (NSW 857302).

Engel and Merrill (2004) regard this species as being endemic to Tasmania. Records from Queensland, NSW, and Victoria may be based on misidentifications of *Neolepidozia tridactylis*, as are the reports of *N. capilligera* from New Zealand.

Tas.

Neolepidozia consobrina (J.J.Engel & G.L.Merr.) E.D.Cooper

≡ *Telaranea consobrina* J.J.Engel & G.L.Merr.

Ref.: Engel & Smith Merrill 2004 (dist.)

Herbarium voucher: Tasmania: Sophia Point, Macquarie Harbour, Jan. 1900, *T.B. Moore 134* (HO 87364).

Vic., Tas.

Neolepidozia disparata (J.J.Engel & G.L.Merr.) E.D.Cooper

≡ *Telaranea disparata* J.J.Engel & G.L.Merr.

Herbarium voucher: Queensland: Mount Bartle Frere, centre peak, Wooroonooran National Park, 15 Jul. 2005, *E.A. Brown & M.A.M. Renner 2224* (NSW 1005701).

Qld

Neolepidozia palmata (J.J.Engel & G.L.Merr.) E.D.Cooper

≡ *Telaranea palmata* J.J.Engel & G.L.Merr.

Ref.: Engel & Smith Merrill 2004 (dist.)

Herbarium voucher: Tasmania: Hartz Mountains. Dry Creek, *E.D. Cooper 107* (NSW 870675).

Tas.

Neolepidozia patentissima (Hook.f. & Taylor) E.D.Cooper

≡ *Jungermannia patentissima* Hook.f. & Taylor
Telaranea patentissima (Hook.f. & Taylor) E.A.Hodgs.

= *Lepidozia gottscheana* Lindenb.
Telaranea gottscheana (Lindenb.) E.A.Hodgs.
Neolepidozia gottscheana (Lindenb.) Hodgs.

Ref.: Engel & Glenny 2008 (dist.)

Herbarium voucher: Tasmania: near Scotts Peak Road, 2.2 km S of junction with Gordon River Road, E of S end of Lake Gordon, 28 Jan. 1977, *J.J. Engel 13800* (HO 530659).

Records of *Neolepidozia patentissima* from Lichfield National Park in the Northern Territory, and northern Queensland should be checked. They are probably *Neolepidozia disparata*, which is outwardly similar to *N. patentissima*.

NSW, Vic., Tas.

Neolepidozia patentissima var. **ampliata** (J.J.Engel & G.L.Merr.) E.D.Cooper

≡ *Telaranea patentissima var. ampliata* J.J.Engel & G.L.Merr.

Herbarium voucher: Tasmania: near Scotts Peak Road, 2.2 km S of junction with Gordon River Road, E of S end of Lake Gordon, 28 Jan. 1977, *J.J. Engel 13783* (HO 530630).

Tas.

Neolepidozia patentissima var. **patentissima**

Herbarium voucher: Tasmania: Ballroom Forest, SW side of Lake Dove, 4 Feb. 1977, *J.J. Engel* 14016 (HO 530700).

Tas.

Neolepidozia quadristipula (Steph.) E.D.Cooper

≡ *Lepidozia quadristipula* Steph.
Telaranea quadristipula (Steph.) J.J.Engel & G.L.Merr.

Ref.: Engel & Smith Merrill 2004 (dist.)

Herbarium voucher: New South Wales: Rotunda, Blackheath, 4 Jan. 1911, *W.W. Watts 1009* (NSW 361247).

NSW

Neolepidozia tridactylis (Lehm. & Lindenb.) E.D.Cooper

≡ *Jungermannia tridactylis* Lehm. & Lindenb.

= *Lepidozia oldfieldiana* Steph.

Ref.: Engel & Glenny 2008 (dist.)

Herbarium voucher: Tasmania: Tahune Forest Reserve, near Huon River, N of Hartz Mountains National Park, 28 Mar. 1983, *J.J. Engel 19875* (HO 530704).

The sole record of *Neolepidozia tridactylis* from Queensland should be confirmed.

Qld, NSW, Vic., Tas.

Neolepidozia verruculosa (J.J.Engel & Merrill) E.D.Cooper

≡ *Telaranea verruculosa* J.J.Engel & Merrill

Ref.: Cooper et al. 2013 (tax.) Engel & Merrill 2004 (dist.)

Herbarium voucher: Queensland: Kuranda, Wrights Lookout Surprise to Creek Track, 9 Jul. 1994, *Scott s.n.* (MELU 1668).

Qld

Nothogymnomitrion R.M.Schust.

Ref.: Shaw et al. 2015 (tax.)

Nothogymnomitrion erosum (Carrington & Pearson) R.M.Schust.

≡ *Cesia erosa* Carrington & Pearson

= *Cesia stygia var. denticulata* Berggr.

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Victoria: Mount Buller, summit, 28 Feb. 2011, *E.A. Brown & M.A.M. Renner 5136* (NSW 875863).

Vic., Tas. NSW, Macquarie I

Notoscyphus Mitt.

Ref.: Shaw et al. 2015 (tax.)

Notoscyphus lutescens (Lehm. & Lindenb.) Mitt.

≡ *Jungermannia lutescens* Lehm. & Lindenb.

Herbarium voucher: Queensland: Track to Surprise Creek from Barron Falls Lookout, c. 50 m beyond complex notophyll vine forest, Barron Falls National Park, 9 Jul. 1994, *E.A. Brown & B.M. Wiecek 94/422* (NSW 296978).

Qld, NSW

Notothylas Sull. ex A.Gray

Notothylas javanica (Sande Lac.) Gottsche

≡ *Blasia javanica* Sande Lac.

Ref.: Cargill 2016 (tax., dist.)

Herbarium voucher: Northern Territory: Fish River Station, 25 Apr. 2012, *D.C. Cargill 1274* (CANB 811405.1).

NT

Notothylas orbicularis (Schwein.) Sull.

≡ *Targionia orbicularis* Schwein.

Ref.: Cargill 2016 (tax., dist.)

Herbarium voucher: Queensland: Blencoe Creek, Kirrama Forest [now Kirrama NP], Herberton Shire, 22 May 1985, *I.G. Stone* MUCV 7239*p.p.* (MELU)

Qld, WA

Nowellia Mitt.

Ref.: Crandall-Stotler et al. 2009b (tax.)

Nowellia curvifolia (Dicks.) Mitt.

≡ *Jungermannia curvifolia* Dicks.

Ref.: Pócs et al. 2012 (tax., dist.)

Herbarium voucher: Queensland: Thornton Peak, track to summit from Hilda Creek, on summit plateau, Daintree National Park, 17 Aug. 2017, *M.A.M. Renner, A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys 8595* (NSW 1061117).

Qld

Nowellia langii Pears.

Ref.: Pócs et al. 2012 (tax., dist.)

Herbarium voucher: Queensland: Kirrama Range, tributary of Dunn Creek above Kirrama State Forest Road, 8 Apr. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 6594* (NSW 1061601).

Qld

Pachyschistochila R.M.Schust. & J.J.Engel

Ref.: Engel & Glenny 2019b (tax.)

As circumscribed on morphological features by Engel and Glenny (2019b) *Pachyschistochila* is probably monophyletic, but its recognition renders *Schistochila* paraphyletic, according to molecular phylogenetic evidence presented by He & Glenny (2014). We recognise *Pachyschistochila* as a matter of convenience, given further refinement of generic circumscription within Schistochilaceae will likely occur.

Pachyschistochila altissima (E.A.Hodgs.) R.M.Schust. & J.J.Engel

≡ *Schistochila altissima* E.A.Hodgs.

Ref.: Engel & Glenny 2019b (tax.)

Pachyschistochila altissima subsp. **altissima**

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Macquarie Island: *Seppelt 9644*.

Macquarie I.

Pachyschistochila parvistipula (Rodway) R.M.Schust. & J.J.Engel

≡ *Schistochila parvistipula* Rodway

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: Lake St Clair area, S-facing slope in valley between Mt Rufus and Mt Hugel, 27 Feb. 1983, *J.J. Engel 19343B* (HO 530675).

Tas.

Pachyschistochila succulenta J.J.Engel & R.M.Schust.

≡ *Schistochila succulenta* (J.J.Engel & R.M.Schust.) Xiao L.He & Glenny

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: Rodway Range, between Rodway Ski Tow and K Col area, 17 Feb. 1977, *J.J. Engel 14410A* (HO 90814).

Tas.

Pachyschistochila trispiralis (R.M.Schust.) R.M.Schust. & J.J.Engel

≡ *Schistochila trispiralis* R.M.Schust.

Ref.: Engel & Glenny 2019b (tax., dist.)

Tas.

Pallavicinia Gray, *nom. cons.*

Pallavicinia lyellii (Hook.) Gray

≡ *Jungermannia lyellii* Hook.

Ref.: Engel 2020 (dist.)

Herbarium voucher: New South Wales: Berowra Heights, Alan Road West, 2 Mar. 1998, *A.J. Downing* (NSW 422695).

WA, **Qld**, **NSW**, **?Vic.**, **Tas.**

Pallavicinia purpurea Steph.

Pallavicinia purpurea is a poorly known species that requires further study. The original material is from the Blue Mountains.

NSW

Pallavicinia rubristipa Schiffn.

Herbarium voucher: New South Wales: The Castle, Budawang Range, 25 km W of Milton, 2 Oct. 1974, *H. Streimann 1303* (CBG 55884.1).

NSW, **Vic.**, **Tas.**

Pallavicinia xiphoides (Hook.f. & Taylor) Trevis.

≡ *Jungermannia xiphoides* Hook.f. & Taylor

= *Blyttia spinosa* Gottsche

Herbarium voucher: Australian Capital Territory: Namadgi National Park. Top of Ginnini [Ginini] Falls, 29 Nov. 2018, *D.C. Cargill* 1602 (CANB 909628.1).

While we acknowledge there are deficiencies in the current generic circumscription within Pallavicenniaceae (Mamontov et al. 2021), we prefer to wait for a full resolution of species relationships ahead of comprehensive and complete refinement to generic classification, rather than adopting piecemeal a flux of progressive refinement and rearrangement.

WA, **NSW**, **ACT**, **Vic.**, **Tas.**

Paracromastigum Fulford & J.Taylor

Ref.: Engel & Glenny 2008 (tax.)

Paracromastigum longiscyphum (Taylor) R.M.Schust. & J.J.Engel

≡ *Jungermannia longiscypha* Taylor

Lepidozia longiscypha (Taylor) Steph.

= *Lepidozia longiscypha var. occidentalis* Herzog

Herbarium voucher: Western Australia: Walpole District. Weld River Bridge on South West Highway, 50 km NW of Walpole, 3 Dec. 2001, *B.G. Hammersley 3004* (PERTH 6132987).

Qld, **NSW**, **Vic.**, **Tas.**, **WA**, **Lord Howe I.**, **Norfolk I.**

Paracromastigum vastilobum (Steph.) J.J.Engel & G.L.Merr.

≡ *Lepidozia vastiloba* Steph.

The protologue of *Lepidozia vastiloba* Steph. suggests this taxon is inappropriately placed in *Paracromastigum*. The features that are anomalous within *Paracromastigum* include the 'remota reviterque pinnatus....Folia symmetrica ad medium triloba.. Amphigastria... ad 2/3 triloba, lobis porrectis linearibus obtusissimis'. Engel and Merrill transferred this species to *Paracromastigum* without examining type material. Their assessment was based on Stephani's Icones, which illustrated a gathering by Watts from NSW, and a second specimen collected by Weymouth from Tasmania which 'both agree with the protologue'. However, the Weymouth specimen possesses *Acromastigum*-type branches, but not *Microlepidozia*-type branches, which occur in the Watts specimen. This difference in branch-type production indicates that these two specimens may belong to different species.

NSW, **Tas.**

Petalophyllum Nees & Gottsche ex Lehm.

Ref.: Crandall-Stotler et al. 2009b (tax.)

Petalophyllum preissii Lehm.

Ref.: Söderström et al. 2016 (tax.); Scott 1985 (dist.)

Herbarium voucher: Western Australia: Rottnest, *J.A.L. Preiss 2472* (MEL 1038099A).

SA, **Vic.**, **WA**

Phaeoceros Prosk.

Phaeoceros carolinianus (Michx.) Prosk.

≡ *Anthoceros carolinianus* Michx.

Phaeoceros laevis subsp. *carolinianus* (Michx.) Prosk.

= *Anthoceros communis* Steph.

= *Anthoceros brotheri* Steph.

= *Anthoceros multicapsulus* Steph.

= *Anthoceros australiae* Beauverd

Anthoceros crispus Steph., *nom. illeg.*

Ref.: Proskauer 1951 (tax.); Cargill & Fuhrer 2008 (dist.)

Herbarium voucher: Western Australia: Walpole, behind and east of Walpole Visitor's centre, 27 July 2022, *D.C. Cargill 1723* (CANB 956898.1).

ACT, **Lord Howe I.**, **NSW**, **Norfolk I.**, **Qld**, **SA**, **Tas.**, **Vic.**, **WA**

Phaeoceros engelii Cargill & Fuhrer

Ref.: Cargill & Fuhrer 2008 (tax., dist.)

Herbarium voucher: Victoria: Kentbruck Road bridge over Moleside Creek, Lower Glenelg National Park, 27 Aug. 2002, *D.C. Cargill 363* (CANB 654152.1).

Vic.

Phaeoceros evanidus (Steph.) Cargill & Fuhrer

≡ *Anthoceros evanidus* Steph.

Ref.: Cargill & Fuhrer 2008 (tax., dist.)

Herbarium voucher: New South Wales: Duck Creek Road, 22 km WNW of Bulahdelah, 22 Apr. 1990, *J.A. Curnow 3304* (CBG 9313538.1).

NSW, **Qld**, **SA**

Phaeoceros inflatus (Steph.) Cargill & Fuhrer

≡ *Anthoceros inflatus* Steph.

Ref.: Cargill & Fuhrer 2008 (tax., dist.)

Herbarium voucher: Victoria: Stone Brae, Warrandyte State Park, 6 Sep. 2002, *D.C. Cargill 474* (CANB 743615.1).

NSW, **Qld**, **Vic.**

Phaeoceros tuberosus (Taylor) Prosk.

≡ *Anthoceros tuberosus* Taylor

Ref.: Proskauer 1964 (tax.)

Herbarium voucher: Western Australia: Muir Highway, 200 m NW of Nyamup Road turnoff, in 'roadside' gutter on roadside verge, between road and forest, 3 Sep. 2004, *D.C. Cargill 730* (CANB 759077.1).

WA

Plagiochasma Lehm. & Lindenb., *nom. cons.*

Plagiochasma rupestre (J.R.Forst. & G.Forst.) Steph.

= *Aytonia extensa* Steph.

Plagiochasma extensum (Steph.) Steph.

≡ *Aytonia rupestris* J.R.Forst. & G.Forst.

= *Plagiochasma australe* Nees

Ref.: Söderström et al. 2016 (tax.); Scott 1985 (dist.)

Herbarium voucher: South Australia: Morialta Conservation Park, c. 10 km ENE of Adelaide, 30 Aug. 2002, *D.C. Cargill 402* (CANB 743549.1).

WA, **NT**, **SA**, **Qld**, **NSW**, **ACT**, **Vic.**, **Lord Howe I.**, **Norfolk I.**

Plagiochila (Dumort.) Dumort., *nom. cons.*

≡ *Radula* sect. *Plagiochila* Dumort.

Plagiochila abietina (Nees) Nees & Mont.

≡ *Jungermannia abietina* Nees

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Mt Finnegan, 7 Sep. 1948, *L.J. Brass 20141* (MEL 1039222A).

Qld

Plagiochila acutifolia Steph.

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Norfolk Island: Mt Pitt Road, Norfolk Island National Park, 27 Apr. 1994, *R. Ward 94-6* (CANB 9507859.1).

Qld, **NSW**, **Norfolk I.**

Plagiochila aemula M.A.M.Renner

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Upper West Mulgrave River, below Bobbin Bobbin Falls, 3 Sep. 2014, *L.J. Gray & M.A.M. Renner 7334* (NSW 880509).

Qld

Plagiochila aenea M.A.M.Renner

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Track to Manjal Jimalji, between coral fern patch and split rock, Daintree National Park, 19 May 2014, *M.A.M. Renner & T.C. Wilson 6975* (NSW 858925).

Qld

Plagiochila apatila M.A.M.Renner

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Tully Falls Road, Charmill Creek, Tully Falls National Park, 31 May 2014, *M.A.M. Renner & T.C. Wilson 7090* (NSW 858920).

Qld

Plagiochila arbuscula (Brid. ex Lehm. & Lindenb.) Lindenb.

≡ *Jungermannia arbuscula* Brid. ex Lehm. & Lindenb.

= *Plagiochila australis* Steph.

= *Plagiochila ferdinandi-muelleri* Steph.

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Road to Paluma Dam and Mount Spec, tributary of Birthday Creek, Paluma Range National Park, 7 May 2014, *M.A.M. Renner & T.C. Wilson 6879* (NSW 870542).

Qld

Plagiochila baileyana Steph.

= *Plagiochila baileyana* Steph. ex F.M.Bailey, *nom. inval.*

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Bartle Frere, *M.A.M. Renner 7311 & L.J. Gray* (NSW 880456).

Qld,

Plagiochila banksiana Gottsche

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Tasmania: Macquarie Island, NW of Handspike Corner, 20 Feb. 1980, *R.D. Seppelt 10230* (HO 577588).

Macquarie I.

Plagiochila bantamensis (Reinw., Blume & Nees) Mont.

≡ *Jungermannia bantamensis* Reinw., Blume & Nees

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Tully Falls Road, Charmill Creek, Tully Falls National Park, 31 May 2014, *M.A.M. Renner & T.C. Wilson 7085* (NSW 870787).

Qld

Plagiochila baylisii Inoue & R.M.Schust.

Ref: Renner 2018 (tax., dist.)

Herbarium voucher: Tasmania: Murchison Highway near Mountain Creek, 18 Mar 2008, *J. Jarman* (HO 572107).

Tas.

Plagiochila blepharophora (Nees) Lindenb.

≡ *Jungermannia blepharophora* Nees

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Tully Falls Road, Charmill Creek, Tully Falls National Park, 31 May 2014, *M.A.M. Renner & T.C. Wilson 7086* (NSW 870335).

Qld

Plagiochila circinalis (Lehm. & Lindenb.) Lehm. & Lindenb. ex Lindenb.

≡ *Jungermannia circinalis* Lehm. & Lindenb.

= *Jungermannia hemicardia* Hook.f. & Taylor

= *Plagiochila decurvifolia* Steph.

= *Plagiochila deflexifolia* Steph.

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Victoria: Mount Ellery, summit area, Errinundra National Park, 4 Mar. 2011, *E.A. Brown & M.A.M. Renner 5199* (NSW 893123).

Vic., **Tas.**

Plagiochila conturbata Steph.

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Manjal Jimalji, track over summit, Daintree National Park, 19 May 2014, *M.A.M. Renner & T.C. Wilson 6984* (NSW 880559).

Qld

Plagiochila daviesiana Steph.

= *Plagiochila bellendeniensis* Steph.

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Tully River, Cochable Creek catchment, Cannabullen Creek walking track, Whispy Falls, Tully Gorge National Park, 11 May 2014, *M.A.M. Renner & T.C. Wilson 6918* (NSW 858917).

Qld

Plagiochila fasciculata Lindenb.

= *Plagiochila victoriae* Steph.

= *Plagiochila deltoidea* var. *pachydictyon* Herzog *syn. nov.*

= *Jungermannia aculeata* Hook.f. & Taylor

= *Plagiochila fasciculata* var. *muelleriana* Gottsche

= *Plagiochila rossii* Steph.

= *Plagiochila fasciculata* var. *labillardiereana* Gottsche

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: New South Wales: Dantes Glen walking track, at Fairy Falls, ca. 1 km NW from township of Lawson, AMG Ref: 56 261500 6266600, Blue Mountains National Park, 17 Dec. 2013, *M.A.M. Renner 6801* (NSW 900149).

Qld, **NSW**, **Vic.**, **Tas.**, **Lord Howe I.**

Plagiochila fragmentissima Inoue & R.M.Schust.

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Tasmania: Manuka Road in the Warra Long-Term Ecological Research Site in southern Tasmania, 30 Apr. 2002, *J. Jarman s.n.* (HO 546905)

Plagiochila fragmentissima has been widely misunderstood, as it is based on type material that is atypical for the species. Most specimens do not express the fragmenting leaves that characterise the type gathering.

Tas.

Plagiochila fuscella (Hook.f. & Taylor) Taylor & Hook.f. ex Gottsche, Lindenb. & Nees

≡ *Jungermannia fuscella* Hook.f. & Taylor

= *Plagiochila taylorii* Steph.

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Tasmania: Waterfall Creek State Reserve, South Bruny Range, 28 Apr. 1993, *A. Moscal 25214* (HO 577324).

Vic., **Tas.**, **Macquarie I.**

Plagiochila hampeana Gottsche

Ref.: Renner 2018 (tax.)

Herbarium voucher: Queensland: Mt Finnigan, on and flanks of the summit, Cedar Bay National Park, 8 Jun. 2017, *M.A.M. Renner, H. Hancock, T. Houghton, L. Roberts, A. Rouse & S. Worboys 7992* (NSW 1060479).

Plagiochila hampeana is a new record for Australia, known by a single recent gathering from Mt Finnigan in the Wet Tropics Bioregion of north-east Queensland.

Qld

Plagiochila hartziana Pearson

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Tasmania: Mt Wellington, Jan. 1900, *L. Rodway* (HO 576900).

Tas.

Plagiochila incurvicolla (Hook.f. & Taylor) Taylor & Hook.f. ex Gottsche, Lindenb. & Nees

≡ *Jungermannia incurvicolla* Hook.f. & Taylor

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Tasmania: road to Corinna, 21 Nov. 1989, *J. Jarman* (HO 572974).

Tas.

Plagiochila intertexta Hook.f. & Taylor

= *Plagiochila sinclairii* Mitt.

= *Plagiochila traversii* Steph.

Ref.: Renner 2018 (tax., dist.)

Cunningham's collections of *Plagiochila intertexta,* which are the only gatherings of that species from Norfolk Island and Australia, are probably incorrectly attributed to Norfolk Island. No habitat suitable for *Plagiochila intertexta* appears to be present on Norfolk Island. Cunningham purportedly collected on Norfolk Island several moss species that are otherwise endemic to New Zealand, and these mosses are thought to have been mislabelled (Streimann 2006). It is possible that the Norfolk Island specimens of *Plagiochila intertexta* are also attributed to Norfolk Island in error. We retain *Plagiochila intertexta* in the checklist with doubt.

?Norfolk I.

Plagiochila lamellata M.A.M.Renner

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Track to Manjal Jimalji, between coral fern patch and split rock, Daintree National Park, 19 May 2014, *M.A.M. Renner & T.C. Wilson 6976* (NSW 858927).

Qld

Plagiochila meridionalis M.A.M.Renner

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: New South Wales: Macpherson Range, west of Toolona Lookout, Lamington National Park, 6 Mar. 2014, *A.E. Orme & M.A.M. Renner 6826* (NSW858805).

Qld, **NSW**

Plagiochila minax M.A.M.Renner

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Tully River, Cochable Creek catchment, Cannabullen Creek walking track, Whispy Falls, Tully Gorge National Park, 11 May 2014, *M.A.M. Renner & T.C. Wilson 6915* (NSW 858855).

Qld

Plagiochila minutissima M.A.M.Renner

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Bartle Frere, stream flowing south past Western Summit camp from summit ridge north of Bartle Frere summit, Wooroonooran National Park, 2 Sep. 2014, *L.J. Gray & M.A.M. Renner 7312* (NSW 880483).

Qld

Plagiochila monospiris Inoue & Grolle

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Paluma, Cloudy Creek, Paluma Range National Park, 8 May 2014, *M.A.M. Renner & T.C. Wilson 6898* (NSW 859318).

Qld

Plagiochila nebulosa M.A.M.Renner

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Tully Falls Road, track to Rhyolite Pinnacle from Charmillan Creek, Tully Falls National Park, 1 Jun. 2014, *M.A.M. Renner & T.C. Wilson 7112* (NSW 852994).

Qld

Plagiochila norfolkiensis Steph.

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Norfolk Island: 1884, *I. Robinson*, ex herb. Melbourne (G 00069848).

Norfolk I.

Plagiochila obtusa Lindenb.

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Mount Carbine Tableland, western slopes of Mount Spurgeon summit, Coopers Clearing, 15 May 2014, *M.A.M. Renner & T.C. Wilson 6941* (NSW 853117).

Qld

Plagiochila paucidens Steph.

= *Plagiochila camarae* Steph. ex Dugas

= *Plagiochila metcalfii* Steph.

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: New South Wales: Dalwood, Richmond River, 15 Aug. 1900, *W.W. Watts 154* (NSW 444136).

NSW, **Lord Howe I.**, **Norfolk I.**

Plagiochila queenslandica Steph.

= *Plagiochila pendula* Hampe & Gottsche, *nom. inval.*

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Mount Sorrow, vicinity of summit, Daintree National Park, 21 May 2014, *M.A.M. Renner & T.C. Wilson 6990* (NSW 858978).

Qld

Plagiochila ratkowskyana Inoue

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Tasmania: Whyte-Pieman Rivers junction, Pieman River State Reserve, 8 Feb. 1995, *A. Moscal 26610D* (HO 577100).

Tas., **Macquarie I.**

Plagiochila retrospectans Nees

= *Jungermannia opisthotona* Hook.f. & Taylor

= *Jungermannia retrospectans* Nees, *nom. illeg.*

= *Plagiochila apiculata* Steph. ex Weymouth, *nom. inval.*

= *Plagiochila apiculata* Steph. ex Dugas, *nom. inval.*

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Victoria: Angahook-Lorne State Park, near Lorne, walking track from Erskine Falls to Lorne along Erskine River, Erskine Falls end, 1 Apr. 2002, *N. Klazenga 6006* (MEL 2131756A).

NSW, **Vic.**, **Tas.**, **Macquarie I.**

Plagiochila sandei Dozy ex Sande Lac.

= *Plagiochila robinsonii* Steph.

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Norfolk Island: *Isaac Robinson* comm. F. v. Muller, Feb 1885, ex herb. Stephani (MEL).

Norfolk I.

Plagiochila stephensoniana Mitt.

= *Plagiochila obscura* Colenso

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Tasmania: Wallaby Bay, Port Davey, 10 Jan. 1987, *A. Moscal 13866E* (HO 577419).

Tas.

Plagiochila streimannii Inoue

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Windsor Tableland 38 km NW of Mossman, 26 Jun. 1984, *H. Streimann 29726* (CANB 8407897, *p.p.*).

Qld

Plagiochila strombifolia (Taylor ex Lehm.) Taylor

= *Jungermannia strombifolia* Taylor ex Lehm,

= *Plagiochila neohoweana* Pearson

= *Plagiochila stuartiana* Gottsche

= *Plagiochila kingiana* Gottsche

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: New South Wales: Dilgry River, Devils Hole, Barrington Tops National Park, 15 Dec. 2011, *M.A.M. Renner 5860* (NSW 898641).

NSW, **Vic.**, **Tas.**

Plagiochila subfasciculata Colenso

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Lord Howe Island: Mount Gower, northern reaches of summit, 10 Jun 2000, *E.A. Brown 00/35 & A.J. Leishman* (NSW 444725).

Lord Howe I.

Plagiochila sydneyensis Beauverd

≡ *Plagiochila remyana* Steph., *nom. illeg.*

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Mount Sorrow, vicinity of summit, Daintree National Park, 21 May 2014, *M.A.M. Renner & T.C. Wilson 6992* (NSW 870786).

Qld

Plagiochila teysmannii Sande Lac.

= *Plagiochila multifurcata* Steph.

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Cochable Creek catchment, Cannabullen creek walking track, Whispy Falls, Tully Gorge National Park, 11 May 2014, *M.A.M. Renner & T.C. Wilson 6917* (NSW 855511).

Qld

Plagiochila vampira M.A.M.Renner

Ref.: Renner 2018 (tax., dist.)

Herbarium voucher: Queensland: Kahlpalim Rock, between summit and junction with Ridge Track, Dinden National Park, 12 May 2014, *M.A.M. Renner & T.C. Wilson 6929* (NSW 855503).

Qld

Plagiochila vitiensis Mitt.

= *Plagiochila brotheri* Steph.

Ref.: Renner 2018 (tax.)

Herbarium voucher: Queensland: Mount Sorrow, vicinity of summit, Daintree National Park, 21 May 2014, *M.A.M. Renner & T.C. Wilson 6989* (NSW 870755).

Qld

Pleurozia Dumort.

Pleurozia articulata (Lindb.) Schiffn.

≡ *Physiotium articulatum* Lindb.

= *Physiotium muelleri* Gottsche ex J.B.Jack

Pleurozia muelleri (Gottsche ex J.B.Jack) Steph.

= *Physiotium muelleri* Gottsche ex J.B.Jack

= *Pleurozia ferdinandi-muelleri* Steph., *nom. illeg.*

Herbarium voucher: Queensland: Mt Finnegan, track from Roberts farm to summit, Cedar Bay National Park, 7 Jun. 2017, *M.A.M. Renner, H. Hancock, T. Houghton, L. Roberts, A. Rouse & S. Worboys 8075* (NSW 1060546).

Qld

Plicanthus R.M.Schust.

Ref.: Crandall-Stotler et al. 2009b (tax.)

Plicanthus hirtellus (F.Weber) R.M.Schust.

≡ *Jungermannia hirtella* F.Weber

Ref.: Schuster 2002b (tax.)

Herbarium voucher: Queensland: Mt Finnigan, on and flanks of the summit, Cedar Bay National Park, 8 Jun. 2017, *M.A.M. Renner, H. Hancock, T. Houghton, L. Roberts, A. Rouse & S. Worboys 7996* (NSW 1060483).

Qld, **NSW**

Podomitrium Mitt.

Ref.: Crandall-Stotler et al. 2009b (tax.)

Podomitrium phyllanthus (Hook.) Mitt.

= *Jungermannia cladorrhizans* Hook.f. & Taylor

≡ *Jungermannia phyllanthus* Hook.

= *Pallavicinia campanulata* Steph.

Herbarium voucher: New South Wales: Fairy Gotto on the Pierce's Pass track near the Mount Wilson turnoff, Blue Mountains National Park, 25 Mar. 1989, *R.G. Coveny & P.D. Hind 12966* (NSW 457696).

NT, **Qld**, **NSW**, **Vic.**, **Tas.**

Porella L.

Porella crawfordii Steph.

≡ *Madotheca crawfordii* (Steph.) Steph.

= *Porella queenslandica* (Steph.) S.Hatt.

Madotheca queenslandica Steph.

= *Madotheca godofrediana* Gottsche, *nom. inval.*

Herbarium voucher: Queensland: Scrubby Creek, Wongabel State Forest, 5 km SSE of Atherton, 28 Feb. 1983, *H. Streimann 27018* (CBG 8302769.1).

Published as '*cranfordii*', a correctible error.

Qld, **NSW**, **Lord Howe I.**, **?Norfolk I.**

Porella elegantula (Mont.) E.A.Hodgs.

≡ *Madotheca elegantula* Mont.

= *Madotheca stangeri* Lindenb. & Gottsche

Ref.: So 2002b (dist.)

Relationships between Australian and New Zealand *Porella elegantula* require further investigation.

?NSW, ?**Lord Howe I. ?Norfolk I.**

Protolophozia (R.M.Schust.) Schljakov

≡ *Lophozia* subg. *Protolophozia* R.M.Schust.

Ref.: Váňa et al. 2013f (tax.)

Protolophozia androgyna R.M.Schust. ex Váňa & L.Söderstr.

Ref.: Váňa et al. 2013f (tax., dist.)

Herbarium voucher: Tasmania: *R.M. Schuster 50513* (F).

Tas.

Protolophozia herzogiana (E.A.Hodgs. & Grolle) Váňa & L.Söderstr.

≡ *Lophozia herzogiana* E.A.Hodgs. & Grolle

Ref.: Váňa et al. 2013f (tax.); Meagher 2007a (dist.)

Herbarium voucher: New South Wales: Tinderry Mountains, 9 km ESE of Michelago (1.8 km W of Calabash Road turnoff from Tinderry Road), 12 Jan. 1993, *J.A. Curnow 4598* (CBG 9506549.1).

NSW

Protolophozia tasmanica (R.M.Schust.) Váňa & L.Söderstr.

≡ *Lophozia tasmanica* R.M.Schust.

Ref.: Váňa et al. 2013f (tax.); Engel & Glenny 2008 (dist.)

Herbarium voucher: Victoria: c. 2 km S of Wall of China, 5 Jul. 1998, *K. Ough* (MEL 2055354A).

Vic., **Tas.**

Pseudocephalozia R.M.Schust.

Pseudocephalozia paludicola R.M.Schust.

Ref.: Engel & Glenny 2008 (tax., dist.)

Vic., **Tas.**

Pseudomarsupidium Herzog

Ref.: Engel & Glenny 2008 (tax.)

Pseudomarsupidium piliferum (Steph.) Herzog ex Grolle

≡ *Marsupidium piliferum* Steph.

= *Adelanthus humilis* Steph.

= *Adelanthus bisetulus* (Steph.) Grolle

Tylimanthus bisetulus Steph.

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Ballroom Forest, SW side of Lake Dove, 4 Feb. 1977, *J.J. Engel 14024* (HO 530676).

NSW, **Vic.**, **Tas.**

Psiloclada Mitt.

Psiloclada clandestina Mitt.

Ref.: Engel & Glenny 2008 (tax.)

Psiloclada clandestina subsp. **clandestina**

Ref.: Engel & Glenny 2008 (dist.)

Herbarium voucher: New South Wales: Fairy Grotto on the Pierces Pass track, near Mt Wilson turnoff, Blue Mountains National Park, 25 Mar. 1989, *R.G. Coveny & P.D. Hind 12977b* (NSW 216091).

NSW, **Vic.**, **Tas.**, **Lord Howe I.**

Ptychanthus Nees

Ptychanthus striatus (Lehm. & Lindenb.) Nees

≡ *Jungermannia striata* Lehm. & Lindenb.

Ref.: Thiers & Gradstein 1989 (tax., dist.)

Herbarium voucher: Queensland: Palmerston National Park, track to Tchupala Falls, 8 Jul. 1984, *B.M. Thiers 2354* (CBG 9909489.1)

Qld, **NSW**

Pycnolejeunea (Spruce) Schiffn.

≡ *Lejeunea* subg. *Pycnolejeunea* Spruce

Ref.: Söderström et al. 2015 (tax.)

Pycnolejeunea grandiocellata Steph.

Ref.: He 1999 (tax.)

Herbarium voucher: Queensland: Mount Lewis Road, Mount Lewis National Park, 13 Sep. 2018, *M.A.M. Renner, L. Shu & R-L. Zhu 9024* (NSW1053570).

Pycnolejeunea grandiocellata is a complex, and the relationships between Australian plants and the type warrant investigation (R.L. Zhu, pers. comm.).

Qld

Radula Dumort., *nom. cons.*

Ref.: Crandall-Stotler et al. 2009b (tax.)

Radula acutiloba Steph.

= *Radula papulosa* Steph.

Ref.: Renner 2014 (tax., dist.)

Herbarium voucher: New South Wales: Chandler River, 100 m downstream of track from Checks Lookout, Oxley Wild Rivers National Park, 1 Jan. 2012, *M.A.M. Renner 5889* (NSW 976716).

Qld, NSW

Radula aneurismalis (Hook.f. & Taylor) Nees ex Gottsche, Lindenb. & Nees

≡ *Jungermannia aneurismalis* Hook.f. & Taylor

= *Radula compacta* Castle

Ref.: Promma et al. in press (tax.)

Herbarium voucher: Tasmania: Williamsford Road, Ring River, 31 Jan. 2012, *E.A. Brown & M.A.M. Renner 6039* (HO 584144).

NSW, **Vic.**, **Tas.**, **Macquarie I.**

Radula anisotoma M.A.M.Renner

Ref.: Renner et al. 2013a (tax., dist.)

Herbarium voucher: Norfolk Island: Mount Pitt Reserve, Filmy Fern Trail, off Selwyn Pine Road, 3 Dec 1984, *H. Streimann 32078* (CANB650457)

Norfolk I.

Radula australiana K.Yamada

Ref.: Renner et al. 2013a (tax., dist.)

Herbarium voucher: New South Wales: Main range track to Kosciuszko summit from Charlotte Pass, Mount Kosciuszko National Park, 26 Feb. 2011, *E.A. Brown & M.A.M. Renner 5114* (NSW 893115).

NSW, **Vic.**, **Tas.**

Radula buccinifera (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

≡ *Jungermannia buccinifera* Hook.f. & Taylor

= *Radula wattsiana* Steph.

Ref.: Renner et al. 2013a (tax., dist.)

Herbarium voucher: Tasmania: Southern side of Mount Jerusalem, Walls of Jerusalem National Park, 29 Jan. 2012, *M.A.M. Renner 6025* (NSW 909425).

Qld, **NSW**, **Vic.**, **Tas.**, **WA**

Radula demissa M.A.M.Renner

Ref.: Renner et al. 2013a (tax., dist.)

Herbarium voucher: Tasmania: Mt Eliza, track to summit from Scotts Peak Road, 100 m above Eliza Hut, Southwest National Park, 22 Jan. 2012, *E.A. Brown & M.A.M. Renner 5916* (HO 584150).

NSW, **Vic.**, **Tas.**

Radula forficata M.A.M.Renner

Ref.: Renner et al. 2013b (tax., dist.)

Herbarium voucher: Queensland: Mount Lewis road, Mount Lewis Forest Reserve, 13 Jul. 2005, *E.A. Brown & M.A.M. Renner 2118* (NSW 878032).

Qld

Radula hicksiae K.Yamada

Ref.: Promma et al. in press (tax., dist.)

Herbarium voucher: Queensland: Coast Range, Little Falls Creek catchment, immediately above the coral fern patch on the Manjal Jimalji track from Karnak to rock pinnacle, ENE of spot height 1198, Daintree National Park, 28 Mar. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 6387* (NSW 896866).

Qld

Radula imposita M.A.M.Renner

Ref.: Renner et al. 2013a (tax.)

Herbarium voucher: Queensland: Mount Lewis, headwaters of Leichhardt Creek flowing down SW flanks of summit, Daintree National Park, 27 Mar. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 6356* (NSW 896812).

Qld, NSW

Radula javanica Gottsche

≡ *Radula gottscheana* F.Muell., *nom. illeg.*

Ref.: Renner 2014 (tax., dist.)

Herbarium voucher: Queensland: The Daintree, tributary of Buchanan Creek, Daintree National Park, 26 Mar. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 6333* (NSW 896734).

Even as more narrowly circumscribed by Renner (2014), *Radula javanica* is a complex of at least two elements in Australia and

would benefit from further study including data informing population genetic structure.

Qld

Radula jovetiana K.Yamada

Ref.: Renner et al. 2013b (tax., dist.)

Herbarium voucher: Queensland: Mount Lewis, upper Leichhardt Creek catchment, Daintree National Park, 27 Mar. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 6340* (NSW 896745).

Qld

Radula kilgourii M.A.M.Renner

Ref.: Renner et al. 2013b (tax., dist.)

Herbarium voucher: Queensland: Cairns, Saddle Mountain above Smithfield, 20 Jan. 2011, *C. Kilgour & M.A.M. Renner 5042* (NSW 970350).

Qld

Radula lingulata Gottsche

Ref.: Promma et al. in press (tax., dist.)

Herbarium voucher: Queensland: Road to summit of Mount Blackwood, Pioneer Peaks NP, c. 3.5 km from access gate. 3 Jul. 2014, *A.J. Franks AJF1407032A* (BRI AQ913218).

Qld

Radula loriana Castle

Ref.: Renner et al. 2013b (tax., dist.)

Herbarium voucher: Queensland: South Johnston River, McMillan Creek catchment, Gorrell Track c. 2 km S of South Johnston River picnic area (old forestry camp), Wooroonooran National Park, 6 Apr. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 6571* (NSW 970424).

Qld

Radula madagascariensis Gottsche

Ref.: Renner et al. 2013b (tax., dist.)

Herbarium voucher: Queensland: Stream to Mount Dryander running NW from Patullo Road, Dryander State Forest, 24 Jun. 2005, *E.A. Brown & M.A.M. Renner 1577* (NSW 866148).

Qld

Radula mittenii Steph.

Ref.: Renner et al. 2013a (tax., dist.)

Herbarium voucher: Queensland: Mossman Gorge, Rex Creek, upstream from swingbridge, Daintree National Park, 24 Mar. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 6282* (NSW 896665).

Qld

Radula multiamentula E.A.Hodgs.

Ref.: Promma et al. in press (tax., dist.)

Herbarium voucher: Tasmania: Mt Eliza, unnamed catchment S of Mt Anne track, Southwest Conservation Area, 22 Jan. 2012, *E.A. Brown & M.A.M. Renner 5897* (HO 567966).

Tas.

Radula myriopoda M.A.M.Renner

Ref.: Renner et al. 2013b (tax., dist.)

Herbarium voucher: Queensland: South Johnston River, McMillan Creek catchment, Gorrell Track c. 2 km S of South Johnston River picnic area (old forestry camp), Wooroonooran National Park, 6 Apr. 2013, *E.A. Brown, V.C. Linis & M.A.M. Renner 6560* (NSW 970431).

Qld, **NSW**

Radula notabilis M.A.M.Renner

Ref.: Renner et al. 2013a (tax., dist.)

Herbarium voucher: Queensland: Cook, Wooroonooran National Park, tributary of Babin- da Stream 30 m above junction with Babinda Stream, 3 Apr. 2012, *M.A.M. Renner 6506*, *V.C. Linis, & E.A. Brown* (NSW 909501).

Qld

Radula novae-hollandiae Hampe

Ref.: Renner et al. 2014 (tax., dist.)

Herbarium voucher: New South Wales: Hopkin's Creek, Stanwell Park, 22 Sep. 2010, *E.A. Brown, E.D. Cooper & M.A.M. Renner 5024* (NSW 973484).

Qld, **NSW**, **Lord Howe I.**, **Norfolk I.**

Radula nymannii Steph.

Herbarium voucher: Queensland: South Johnston River, McMillan Creek catchment, Gorrell Track c. 2 km S of South Johnston River picnic area (old forestry camp), Wooroonooran National Park, 6 Apr. 2014, *M.A.M. Renner, V.C. Linis & E.A. Brown 6559* (NSW 1061246).

Qld

Radula ocellata K.Yamada

Ref.: Renner et al. 2014 (tax., dist.)

Herbarium voucher: Queensland: Main Coast Range, track to Devil's thumb, near summit ridge above coral fern patch, Daintree National Park, 26 Jan. 2011, *Y. Baba, C. Kilgour & M.A.M. Renner 5090* (NSW 970874).

Qld

Radula oreopsis M.A.M.Renner

Ref.: Renner 2014 (tax., dist.)

Herbarium voucher: Queensland: South Johnston River catchment, Maple Creek, Maple Creek Road, Wooroonooran National Park, 5 Apr. 2012, *V.C. Linis & M.A.M. Renner 6543* (NSW 899756).

Qld

Radula ornata E.A.Br. & Pócs

Ref.: Promma et al. in press (tax., dist.)

Herbarium voucher: Queensland: Bellenden Ker Range, Mulgrave River catchment, track between Choorichillum and Bartle Frere (South Peak), Wooroonooran National Park, 31 Mar. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 6469* (NSW 897016).

Qld

Radula patens K.Yamada

Ref.: Promma et al. in press (tax., dist.)

Herbarium voucher: Queensland: Mount Lewis, headwaters of Leichhardt Creek flowing down SW flanks of summit, Daintree National Park, 27 Mar. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 6365* (NSW 896819).

Qld

Radula psychosis M.A.M.Renner

Ref.: Renner et al. 2013b (tax., dist.)

Herbarium voucher: Queensland: South Johnston River catchment, Maple Creek, Wooroonooran National Park, 5 Apr. 2012, *V.C. Linis & M.A.M. Renner 6515* (NSW 898728).

Qld

Radula pugioniformis M.A.M.Renner

Ref.: Renner et al. 2013a (tax., dist.)

Herbarium voucher: Queensland: Macpherson Range, Canungra Creek West Branch, 60 m upstream from Picnic Rock, Lamington

National Park, 7 Mar. 2014, *A.E. Orme & M.A.M. Renner 6841* (NSW 870344).

Qld, **NSW**

Radula pulchella Mitt. ex Steph.

Ref.: Renner et al. 2014 (tax., dist.)

Herbarium voucher: New South Wales: Coombadjha Stream catchment, Washpool walk, junction of Coombadjha Stream and Dandahra Gully, Washpool National Park, 11 Apr. 2011, *M.A.M. Renner 5231* (NSW 875777).

Qld, **NSW**

Radula queenslandica K.Yamada

Ref.: Promma et al. in press (tax., dist.)

Herbarium voucher: Queensland: Track to Manjal Jimalji, ridge between coral fern patch and Devils Thumb, Daintree National Park, 18 May 2014, *M.A.M. Renner & T.C. Wilson 6963* (NSW 870345).

Qld

Radula ratkowskyana K.Yamada

Ref.: Renner et al. 2013b (tax., dist.)

Herbarium voucher: Tasmania: Williamsford Road, Ring River, 31 Jan. 2012, *E.A. Brown & M.A.M. Renner 6047* (NSW 909481).

Tas.

Radula retroflexa Taylor

= *Radula fauciloba* Steph.

Ref.: Renner et al. 2014 (tax., dist.)

Herbarium voucher: Queensland: South Johnston River catchment, Maple Creek, Maple Creek Road, Wooroonooran National Park, 5 Apr. 2012, *V.C. Linis & M.A.M. Renner 6523* (NSW 898764).

Qld

Radula robinsonii Steph.

= *Radula parvitexta* Steph.

Ref.: Renner et al. 2013b (tax., dist.)

Herbarium voucher: New South Wales: Point Lookout area, Lyrebird Track between Banksia Point and Weeping Rock, New England National Park, 16 Apr. 2011, *M.A.M. Renner 5284* (NSW 875831).

Qld, **NSW**, **Norfolk I.**

Radula sainsburyana E.A.Hodgs. & Allison

Ref.: Promma et al. in press (tax., dist.)

Herbarium voucher: Tasmania: Mount Eliza summit, Mount Anne track, South West Conservation Area, 22 Jan. 2012, *M.A.M. Renner & E.A. Brown 5909* (NSW 892137).

Published as 'sainsburiana', which should be corrected to 'sainsburyana' in accordance with Art. 60.8(c)

Vic., **Tas.**

Radula squarrosa K.Yamada

Ref.: Promma et al. in press (tax., dist.)

Herbarium voucher: Queensland: Bellenden Ker Range, Mulgrave River catchment, track to Choorichillum from end of Gourka Road, Wooroonooran National Park, 30 Mar. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 6418* (NSW 896957).

Qld

Radula strangulata Hook.f. & Taylor

Ref.: Renner et al. 2013a (tax., dist.)

Herbarium voucher: Tasmania: Waratah-Savage River Road, Arthur River catchment, un-named stream, 28 Jan. 2012, *E.A. Brown & M.A.M. Renner 6016* (NSW 909416).

NSW, **Tas.**

Radula tasmanica Steph.

Ref.: Renner et al. 2013b (tax., dist.)

Herbarium voucher: Tasmania: Mount Eliza, Condominium Creek, South West Conservation Area, 23 Jan. 2012, *E.A. Brown & M.A.M. Renner 5935* (NSW 895266).

Tas.

Radula thiersiae K.Yamada

Ref.: Promma et al. in press (tax., dist.)

Herbarium voucher: Queensland: Thornton Peak, track to summit from Hilda Creek, on summit plateau, Daintree National Park, 17 Aug. 2017, *A.R. Field, T. Hawkes, L. Mulkearns, M.A.M. Renner & S. Worboys 8591* (NSW 1061113).

Qld

Radula tonitrua Pócs & M.A.M.Renner

Ref.: Pócs & Renner 2021 (tax., dist.)

Herbarium voucher: Queensland: South Johnston River catchment, Maple Creek, Wooroonooran National Park, 5 Apr. 2012, *V.C. Linis & M.A.M. Renner 6514* (NSW 898725).

Qld

Radula weymouthiana Steph.

Ref.: Renner et al. 2014 (tax., dist.)

Herbarium voucher: Tasmania: Tasman Peninsula, without date, *L. Rodway 234* (HO 305348).

Tas.

Reboulia Raddi, *nom. cons.*

Ref.: Crandall-Stotler et al. 2009b (tax.)

Reboulia queenslandica (Steph.) M.L.Hicks

≡ *Plagiochasma queenslandicum* Steph.

Ref.: Hicks 1992 (tax., dist.)

Herbarium voucher: New South Wales: Jenolan Caves, gardens of Caves House, 11 Oct. 2000, *A.J. Downing & R.J. Oldfield* (NSW 497593).

Reboulia queenslandica is a polyploid.

Qld, **NSW**, **ACT**, **Vic.**, **WA**

Riccardia Gray, *nom. cons.*

Riccardia aequicellularis (Steph.) Hewson

≡ *Aneura aequicellularis* Steph.

= *Riccardia reducta* R.M.Schust.

= *Aneura filiformis* Steph.

Ref.: Hewson 1970b (tax., dist.)

NSW, **Vic.**, **Tas. Macquarie I**

Riccardia alba (Colenso) E.A.Br.

≡ *Aneura alba* Colenso

Ref.: Brown & Braggins 1989 (tax.)

Herbarium voucher: New South Wales: Soldiers Creek, 12 Nov. 2000, *E.A. Brown & B.J. Conn 2000/169* (NSW 448611).

Lord Howe I.

Riccardia alcicornis (Hook.f. & Taylor) Trevis.

≡ *Jungermannia alcicornis* Hook.f. & Taylor
Aneura alcicornis (Hook.f. & Taylor) Gottsche
Sarcomitrium alcicorne (Hook.f. & Taylor) Mitt.

Ref.: Brown & Braggins 1989 (tax., dist.)

Herbarium voucher: Tasmania: Mount Eliza c. 50 m above High Camp Memorial hut (not by track), South West Conservation Area, 22 Jan. 2012, *E.A. Brown & M.A.M. Renner 2012/25 A* (NSW 896883).

Tas.

Riccardia babindae Hewson

Ref.: Hewson 1970b (tax., dist.)

Qld

Riccardia bipinnatifida (Colenso) Hewson

≡ *Aneura bipinnatifida* Colenso

= *Aneura polymorpha* Colenso

Ref.: Brown & Braggins 1989 (tax.); Hewson 1970b (dist.)

Herbarium voucher: New South Wales: Port Macquarie; end of The Binnacle, 12 Jun. 2003, *E.A. Brown, W.S. Cuddy & S. Skinner 2003/18* (NSW 605754).

ACT, **Qld**, **NSW**, **Vic.**, **WA**, **Tas.**

Riccardia bliklika Hewson

Ref.: Hewson 1970b (tax., dist.)

Riccardia bliklika var. **bliklika**

Ref.: Hewson 1970b (tax., dist.)

Qld, **Lord Howe I.**

Riccardia browniae A.Hagborg & L.Söderstr.

≡ *Aneura pusilla* Steph.

Riccardia pusilla (Steph.) E.A.Br., *nom. illeg.*

Herbarium voucher: (G 11049).

NSW

Riccardia cochleata (Hook.f. & Taylor) Kuntze7

≡ *Riccia cochleata* Hook.f. & Taylor

Sarcomitrium cochleatum (Hook.f. & Taylor) Kuntze

Aneura cochleata (Hook.f. & Taylor) Hook.f.

= *Aneura erecta* Steph.

= *Aneura lichenoides* Steph., *nom. illeg.*

Ref.: Brown & Braggins 1989 (tax., dist.)

Herbarium voucher: Tasmania: Mount Wellington (summit), 8 Dec. 1990, *E.A. Brown 90/56* (NSW 276954).

NSW, **ACT**, **Vic.**, **Tas.**, **WA**

Riccardia colensoi (Steph.) W.Martin

≡ *Aneura colensoi* Steph.

= *Aneura tasmanica* Steph.

Ref.: Brown & Braggins 1989 (tax., dist.)

Herbarium voucher: New South Wales: Platypus Creek Valley Lookout, Track to Weeping Rock, near Point Lookout, New England National Park, 22 Apr. 1989, *E.A. Brown 89/90 e* (NSW 435804).

NSW, **ACT**, **Vic.**, **Tas.**

Riccardia crassa (Schwägr.) C.Massal.

Ref.: Brown & Braggins 1989 (dist.)

Herbarium voucher: Tasmania: Mount Eliza, unnamed catchment S of Mount Anne track, South West Conservation Area, 22 Jan. 2012, *E.A. Brown & M.A.M. Renner 2012/16* (NSW 896510).

NSW, **ACT**, **Vic.**, **Tas.**, **SA**, **WA**

Riccardia eriocaula (Hook.) Besch. & C.Massal.

≡ *Jungermannia eriocaula* Hook.

Ref.: Brown & Braggins 1989 (tax.); Hewson 1970b (dist.)

Herbarium voucher: Tasmania: Waratah Road (B23) east of Savage River, permanent waterway crossed by road, 12 Feb. 2020, *M.A.M. Renner & T.C. Wilson 9219* (NSW 1099098).

Vic., **Tas.**

Riccardia gracilis (Steph.) R.M.Schust.

≡ *Aneura gracilis* Steph.

Ref.: Hewson 1970b (tax., dist.)

Herbarium voucher: G-11043

Tas.

Riccardia graeffei (Steph.) Hewson

≡ *Aneura graeffei* Steph.

Ref.: Hewson 1970b (tax., dist.)

Herbarium voucher: Queensland: Nandroya Falls, 29 Aug. 1964, *H.J. Hewson* H6484502 (BRI AQ0722078).

Hewson (1970b) treated *Riccardia graeffei* as a name misapplied in Australia to *R. loriana*. Hurlimann (1976) suggested there was confusion between the pacific *R. graeffei* and *R. wattsiana* (Brown & Braggins 1989: 78). This species is evidently reported for Australia on the basis of *Riccardia wattsiana* being a synonym thereof according to Furuki (1991). We have doubts about that synonymy, and maintain the two species as separate, with reservations, in this checklist. See comments under *Riccardia wattsiana*.

WA, **NT**, **Qld**, **NSW**, **Vic.**, **Lord Howe I.**

Riccardia hypipamensis Hewson

Ref.: Hewson 1970b (tax., dist.)

Herbarium voucher: Queensland: Mt Hypipamee, The Crater, 24 Aug. 1964, *H.J. Hewson 448* (NSW 251840).

Qld

Riccardia lobulata (Colenso) E.A.Hodgs.

≡ *Zoopsis lobulata* Colenso

= *Riccardia minima* Carrington & Pearson

Aneura minima (Carrington & Pearson) Steph.

Ref.: Brown & Braggins 1989 (tax., dist.)

Herbarium voucher: New South Wales: Small tributary of Lamonds Creek, just off the Griffith Trail near the Glen, Barren Grounds Nature Reserve, 15 Mar. 1992, *R.G. Coveny 16032* (NSW 2999341)

NSW, **Vic.**, **Tas.**

Riccardia longiflora (Steph.) Hewson

≡ *Aneura longiflora* Steph.

Ref.: Hewson 1970b (tax., dist.)

Herbarium voucher: Tasmania: Mt Wellington, Silver Falls Little pipeline, 27 Nov. 1979, *A.V. Ratkowsky H1468* (CBG 8408775.1).

Tas.

Riccardia macdonaldiana Hewson

Ref.: Hewson 1970b (tax., dist.)

Herbarium voucher: Queensland: Nandroya Falls, 29 Aug. 1964, *H.J. Hewson H6484498* (BRI AQ0722063).

NSW records should be confirmed.

NT, **Qld**, **NSW**

Riccardia marginata (Colenso) Pearson

≡ *Aneura marginata* Colenso

= *Aneura muscoides* Colenso

Riccardia muscoides (Colenso) E.A.Hodgs.

Ref.: Brown & Braggins 1989 (tax.)

Herbarium voucher: New South Wales: Along Wedding Bells Forest Drive, edge of State Forest c. 2 km S of Bucca Road, Orara East State Forest, 20 Jun. 2002, *E.A. Brown, W.S. Cuddy & H. McPherson 109* (NSW 491221).

There is a single, unpublished, record of this species from Australia, a gathering from northern NSW determined by Elizabeth Brown. This record should be confirmed.

NSW

Riccardia nitida (Colenso) E.A.Hodgs.

≡ *Aneura nitida* Colenso

Ref.: Brown & Braggins 1989 (tax.)

Herbarium voucher: Victoria: Chinamans Creek, at Five Mile Road (upstream of bridge), *D.A. Meagher 360* (MEL 2063670A).

Hewson (1970a) overlooked *Riccardia nitida*, and Scott (1985) confused it with the tropical/subtropical *Riccardia wattsiana*, which was regarded as a synonym of *Riccardia graeffei* by Furuki (1991).

?SA, NSW, Vic., Tas

Riccardia prehensilis (Hook.f. & Taylor) C.Massal.

≡ *Jungermannia prehensilis* Hook.f. & Taylor

Tasmanian records of this South American species should be verified.

Tas.

Riccardia rupicola (Steph.) Hewson

≡ *Aneura rupicola* Steph.

Ref.: Hewson 1970b (tax., dist.)

Herbarium voucher: New South Wales: Shaws Bay, 20 Sep. 1901, *W.W. Watts 579* (NSW 251618).

Qld, NSW, Vic., Tas.

Riccardia wattsiana (Steph.) Hewson

≡ *Aneura wattsiana* Steph.

Ref.: Brown & Braggins 1989 (dist.)

Herbarium voucher: New South Wales: Dorrigo National Park, 23 Apr. 1989, *E.A. Brown 89/108* (NSW 436006).

Brown and Braggins (1989) state: "The problem [with respect to *R. graeffei* and *R. wattsiana*], thus, appears to be whether there is one monoicous species with very variable male/paroicous branches and pinnule wings or whether there are two or three separate taxa (with more than one being present in Australia)". This problem has not been satisfactorily resolved, and the synonymy of *R. graeffei* and *R. wattsiana* cannot yet be accepted.

WA, SA, Qld, NSW, ACT, Vic., Tas.

Riccia L., *nom. cons.*

Ref.: Crandall-Stotler et al. 2009b (tax.)

Riccia abdita Cargill

Ref.: Cargill et al. 2021 (tax., dist.)

Herbarium voucher: Northern Territory: Fish River Station, 29 Apr. 2012, *D.C. Cargill 1298* (CANB 811430.1).

NT

Riccia acutisulca Steph.

Na-Thalang (1980) noted that this species belonged to her '*Aquaticae-Terrestriae*' group based on observation of the type material, however, the specimen was infertile, and Stephani's drawing of the species with scales on the ventral flank which is unusual for this group, so she placed this species in her Incertae Sedis list.

Aust.

Riccia albida Sull.

Ref.: Jovet-Ast 2000 (tax., dist.)

The presence of *Riccia albida* in Australia is yet to be confirmed.

WA, Vic.

Riccia areolata Na-Thalang

Ref.: Na-Thalang 1980 (tax., dist.)

Herbarium voucher: New South Wales: 23 km SW of Cobar, 11 Oct. 1984, *K. Hynson 163B* (CANB 894985.1).

Riccia areolata was regarded as synonymous with *Riccardia crinita* by Seppelt but is accepted here as a distinct species based on spore patterns.

NSW, ACT

Riccia asprella Carrington & Pearson

Ref.: Carrington & Pearson 1888 (tax.)

Herbarium voucher: New South Wales: Tuross River, downstream of Nerrigundah Mountain Road bridge, near junction with Eurobodalla Road and River Road, 3 Jul. 2020, *R.W. Purdie 12025B* (CANB 918237.1).

Na-Thalang (1980) published the geographic range for *Riccia asprella* as NSW only. Cargill has since identified collections from the ACT. Seppelt and Beckmann have also identified collections from SA & Vic as *R. asprella* but Beckmann had reservations on the identification of the SA collections. The spores shown in Seppelt's Masters thesis do not match the spores of the isolectotype specimen.

NSW, ACT

Riccia atropurpurea Sim.

Ref. Cargill et al. 2016 (tax., dist.)

Herbarium voucher: Western Australia: 11 km NW of Drysdale River Station, 15 July 1991, *H. Streimann 48482* (CBG 9108529).

WA

Riccia billardierei Mont. & Nees

Ref.: Na-Thalang 1980 (tax.)

Herbarium voucher: Northern Territory: Fish River Station, headwaters of Snape Creek, 25 Apr. 2012, *I. Cowie 13387* (CANB 811452.1).

Published as 'billardierii' an implicit latinization, however in this case correction to the intended latinized form 'billarderii' involves correcting letters other than the terminal vowel or consonant (Art. 60.9), therefore billardierii must be corrected to the non-latinized form 'billardierei'.

WA, NT, SA, Qld

Riccia blackiae Na-Thalang

Ref.: Na-Thalang 1980 (tax., dist.)

Herbarium voucher: Northern Territory: Near Mutitjulu waterhole runoff, Uluru-Kata Tjuta National Park. 8 Sept. 2010, *M. Storer C10/05*. (CANB 795599).

Published as 'blackii' but to be corrected to 'blackiae'.

NT

Riccia cancellata Taylor

Ref.: Jovet-Ast 2000 (tax., dist.)

Herbarium voucher: Western Australia: Swan River. 1843, *J. Drummond s.n.* (lecto: FH 01093781).

Cargill has seen the MEL and FH isolectotypes and images of the NY lectotype.

WA

Riccia caroliniana Na-Thalang

Ref.: Cargill et al. 2021 (tax.)

Herbarium voucher: New South Wales: CULTIVATED: New South Wales, University of Sydney. Grown from live material collected 28 Jan. 1969 from Northern Territory, c. 2 miles [3 km] from Robin Water Fall [Robin Falls, 13°21′S, 131°08′E], 19 Sep. 1969, *O. Na-Thalang 288* (CANB 914649.1).

NT, **Qld**

Riccia cartilaginosa Steph.

= *Riccia marginata* Carrington & Pearson, *nom. illeg.*

Ref.: Scott & Bradshaw 1986 (tax.); McCarthy 2003 (dist.)

Herbarium voucher: New South Wales: Scottsdale Reserve, Bredbo, 7 May 2014, *D.C. Cargill 934* (CANB 900847.1).

SA, **Qld**, **NSW**, **ACT**, **Vic.**

Riccia cavernosa Hoffm.

= *Ricciella multilamellata* Steph.

Ref.: Na-Thalang 1980 (tax.)

Herbarium voucher: Western Australia: Kiwirrkurra Indigenous Protected Area; c. 84.6 km due NE of Kiwirrkurra, 10 Sep. 2015, *D.E. Albrecht 14523* (CANB 882714.1).

WA, **NT**, **SA**, **NSW**, **ACT**, **Vic.**

Riccia chrysocrinita Cargill

Ref.: Cargill et al. 2021 (tax.)

Herbarium voucher: New South Wales: Live material cultivated at Sydney University from plants collected from Maluka cemetery Sturt Highway, Northern Territory. *Na-Thalang 308* (SYD).

NT

Riccia cincta Jovet-Ast

Ref.: Jovet-Ast 2000 (tax., dist.)

Herbarium voucher: Western Australia: 17 km S of Meekatharra, 1 Apr. 1979, *O.H. Volk 75* (CANB 871874.1).

WA

Riccia collata Na-Thalang

Ref.: Na-Thalang 1980 (tax., dist.)

Herbarium voucher: New South Wales: Private Property, Catarrh Creek, Torrington, Northern Tablelands, 8 Jun. 2020, *L. Kool 90* (CANB 916705.1).

Riccia collata was reported from the NT in error, see Cargill et al. (2021) for a discussion of the distribution of *R. collata*.

NSW

Riccia corrugata Jovet-Ast

Ref.: Jovet-Ast 2000 (tax.)

Herbarium voucher: Western Australia: 2 km E of Little Well, Barwidgee Station, 6 Jun. 1988, *R.J. Cranfield 6861* (PERTH 5032288).

WA, **NT**, **SA**

Riccia crassa Steph.

Ref.: Na-Thalang 1980 (tax., dist.)

Herbarium voucher: South Australia: Arckaringa, *R. Helms s.n.* (AD-C 22636).

SA

Riccia crassivenia Jovet-Ast

Ref.: Jovet-Ast 2000 (tax.)

Herbarium voucher: Northern Territory: Caravan Park Katherine, 19 Apr. 1979, *O.H. Volk 111* (CANB 871892.1).

NT

Riccia crinita Taylor

= *Riccia longiciliata* Na-Thalang

Ref.: Na-Thalang 1980 (tax.)

Herbarium voucher: Queensland: Red Falls, Lolworth Creek, 58 km WNW of Charters Towers, 21 Jun. 1986, *J.A. Curnow 962* (CBG 9611704.1).

WA, **NT**, **SA**, **Qld**, **NSW**, **ACT**, **Vic.**

Riccia crozalsii Levier

Ref.: Na-Thalang 1980 (tax.)

Herbarium voucher: South Australia: Morialta Conservation Park, Morialta Falls, approx. 17 km ENE of Adelaide Airport, 30 Sep. 1997, *J.A. Curnow 5093* (CANB 604020.1).

SA, **NSW**, **Vic**, **Tas.**

Riccia crustata Trab. ex Grolle

Ref.: Cargill et al. 2021 (tax.)

Herbarium voucher: Northern Territory: Roper River, 13 km E of Mataranka, 9 Apr. 1989, *J.A. Curnow 2799* (CBG 8916868.1).

WA, **NT**, **SA**, **Vic.**, **Tas.**

Riccia crystallina L.

= *Riccia plana* Taylor

Ref.: Jovet-Ast 1964 (tax.)

Herbarium voucher: Victoria: On Bessiebelle turnoff on the Tyrendarra-Heywood Road, 26 Aug. 2002, *D.C. Cargill 340* (CANB 654163.1).

WA, **SA**, **NSW**, **ACT**, **Vic**, **Tas.**

Riccia deserticola Steph.

Ref.: Na-Thalang 1980 (tax.)

Herbarium voucher: South Australia: Region 1: North-western; ca 26 km by road due W of Cheesman Junction, S face of large hill c. 1 km W of first hill encountered adjacent to road to Mt Poondinna; c. 9 km direct E of Mt Poondinna summit, 29 Aug. 1978, *W.R. Barker* 2978 (CANB 578235.1).

WA, **NT**, **SA**

Riccia duplex Lorb. ex Mull.Frib.

Ref.: Na-Thalang 1980 (tax.)

Riccia duplex var. **duplex**

Ref.: Na-Thalang 1980 (tax.)

Herbarium voucher: South Australia: Glencoe, c. 26 km NW of Mt Gambier, 15 Apr. 1973, *K. Alcock s.n.* (CANB 578234.1).

NT, **SA**, **Qld**, **NSW**, **ACT**, **Vic**, **Tas.**

Riccia duplex var. **megaspora** Na-Thalang

= *Riccia multifida var. divaricata* Na-Thalang

Ref.: Na-Thalang 1980 (tax.)

Herbarium voucher: Queensland: Eungella National Park. Sky window stop, on side of bitumen road in shade, 30 Jun. 2014, *D.C. Cargill 942QLD* (CANB 900923.1).

NT, **Qld**

Riccia eburnea Jovet-Ast

Ref.: Jovet-Ast 2000 (tax.)

Herbarium voucher: Northern Territory: Bank of Tennant Creek at Stuart Hwy, *A.E. Orchard* (AD-C 5580).

WA, **NT**

Riccia epecenia Cargill

Ref: Cargill 2022 (tax., dist.)

Herbarium voucher: New South Wales: Gum Ridge Fire Trail West, Mt Canobolas State Conservation Area (SCA), 20 May 2022, *D.C. Cargill 1702* (CANB 954794.1).

NSW

Riccia fluitans L.

Herbarium voucher: New South Wales: Tuross River, downstream of Nerrigundah Mountain Road bridge, near junction with Eurobodalla Road and River Road, 3 Jul. 2020, *R.W. Purdie 12031B* (CANB 918498.1).

New record for Australia based on recent collections confirmed by molecular data.

Qld, NSW

Riccia gangetica Ahmad ex L.Söderstr., A.Hagborg & von Konrat

Ref.: Cargill et al. 2021 (dist.)

Herbarium voucher: Northern Territory: Fish River Station, 25 Apr. 2012, *D.C. Cargill 1276* (CANB 811407.1).

WA, NT

Riccia inflexa Taylor

= *Riccia punctata* Taylor

Ref.: Jovet-Ast 2000 (tax.)

Herbarium voucher: New South Wales: Gum Swamp, on N side of Newell Highway, c. 4 km WSW from Forbes, 11 Jun. 2016, *R.W. Purdie 10612* (CANB 890895.1).

WA, NT, SA, Qld, NSW, Vic.

Riccia junghuhniana Nees & Lindenb.

Ref.: Na-Thalang 1980 (tax.)

Herbarium voucher: Northern Territory: Fish River Station, 3 May 2012, *D.C. Cargill 1317* (CANB 811449.1).

NT, Qld

Riccia lamellosa Raddi

Ref.: Na-Thalang 1980 (tax.)

Herbarium voucher: South Australia: Mount Remarkable National Park. Blue Gum Flat. 22 Aug. 2016, *D.C. Cargill 1331SA* (CANB 900986.1).

WA, NT, SA, Qld, NSW, ACT, Vic.

Riccia lata Taylor

Ref.: Jovet-Ast 2000 (tax.)

Herbarium voucher: Western Australia: Ad fluv. Cygnorum. [Swan River], 18**43**, *J. Drummond* (MEL 0019780A).

Na-Thalang had included this species as a synonym of *Riccia limbata* (=*R. inflexa*) but the type specimen does not match *R. inflexa*.

WA

Riccia luticola Na-Thalang

Ref.: Cargill et al. 2021 (tax.)

Herbarium voucher: Northern Territory: c. 5 miles [8 km] S of Katherine, margin of swamp, among grass. 5 Feb 1969, *O.Na-Thalang 321* (CANB 914652).

NT

Riccia macrospora Steph.

Ref.: Cargill & Beckmann 2020 (dist.)

Herbarium voucher: South Australia: Arcoeillina Well, Everard Range, *R. Helms s.n.* (MEL 19778).

SA, NT, Qld

Riccia multifida (Steph.) Steph.

≡ *Ricciella multifida* Steph.

Ref.: Na-Thalang 1980 (tax.)

Riccia multifida var. **filiformis** Na-Thalang

Ref.: Na-Thalang 1980 (tax.)

Herbarium voucher: New South Wales: Mallallee Creek, Coonabarabran, 26 Mar. 1967, *O. Na-Thalang 215* (NSW 251934).

NSW

Riccia multifida var. **multifida**

= *Riccia burnettensis* Steph.

Ref.: Na-Thalang 1980 (tax.)

Herbarium voucher: Northern Territory: Fish River Station, 3 May 2012, *D.C. Cargill 1316* (CANB 811448.1).

WA, NT, SA, Qld, NSW, ACT, Vic., Tas.

Riccia multifida var. **torticolla** Na-Thalang

Ref.: Na-Thalang 1980 (tax.)

Herbarium voucher: Western Australia: Poison Creek, 50 miles [80 km] N of Leonora, *R.C. Carolin 5834* (NSW 251936).

WA

Riccia muscicola Steph.

Ref.: Na-Thalang 1980 (tax.)

Herbarium voucher: New South Wales: Rose [Rowes] Lagoon, off Federal Highway, Wollogorang, 14 Jan 2024, *R.W. Purdie 13575* (CANB 997789.1)

WA, SA, Qld, NSW

Riccia nigrella DC.

Ref.: Na-Thalang 1980 (tax.)

Herbarium voucher: New South Wales: Cowal State Forest, along northern boundary, about 15 km due west of Narromine, 17 April 2022, *R.W. Purdie 13077* (CANB 952981.1).

WA, SA, NT, NSW, ACT, Vic., Tas.

Riccia obchantiana Cargill

Ref: Cargill et al. 2021 (tax., dist.)

Herbarium voucher: Northern Territory: grown from live material collected from c. 380 mile(s) Stuart H'way(s), on dry creek, under tree shade, 4 Feb. 1969, *O. Na-Thalang 315* (SYD).

NT

Riccia olgensis Na-Thalang

Ref.: Na-Thalang 1980 (tax.)

Herbarium voucher: Australian Capital Territory: Pine Island, S of Canberra, by R[iver] Murrumbidgee, 28 Aug. 1973, *D.G. Catcheside 66.96* (AD-C 36417).

NT

Riccia papulosa (Steph.) Steph.

≡ *Ricciella papulosa* Steph.

Ref.: Na-Thalang 1980 (tax.)

Riccia papulosa var. **papulosa**

Ref.: Na-Thalang 1980 (tax.)

Herbarium voucher: South Australia: Gawler Ranges National Park, Old Paney Scenic Route road, about 1 km E of junction with Minnipa-Yardea Road, 17 Aug. 2015, *R.W. Purdie 10258* (CANB 882223.1).

WA, NT, SA, NSW, Vic, Tas.

Riccia papulosa var. **variabilis** Na-Thalang

Ref.: Cargill et al. 2021 (tax.)

Herbarium voucher: Northern Territory: Woolner Road, Darwin, 22 Jan 1969, *Na-Thalang 274* (CANB 1000499.1).

WA, NT

Riccia perthiana Steph. ex K.I.Goebel

The status of this species requires further investigation.

Aust.

Riccia porosa Taylor

Ref.: Jovet-Ast 2000 (tax.)

Herbarium voucher: Western Australia: Swan River, 1843, *J. Drummond s.n.* (G00115787).

WA

Riccia pullulans Jovet-Ast

Ref.: Jovet-Ast 2000 (tax.); Cargill et al. 2016 (dist.)

Herbarium voucher: Western Australia: The Humps bei Heyden W.A. [The Humps near (c. 16 km NNE of) Hyden.], 23 Mar. 1979, *O.H. Volk 71* (CANB 871873.1).

WA, **Qld**

Riccia rorida Na-Thalang

Ref.: Na-Thalang 1980 (tax.)

Herbarium voucher: Australian Capital Territory: Cotter River, 27 Jan. 1969, *O. Na-Thalang 191* (NSW 251941).

SA, NSW, ACT, **Vic.**

Riccia rubrispora Steph.

Herbarium voucher: Northern Territory: Askariaga [=Arkaringa Creek], Elder Exploring Expedition, 15 May 1891, *Helms s.n.* (G00052610).

SA

Riccia singularis Jovet-Ast

Ref.: Jovet-Ast 2000 (tax.)

Herbarium voucher: Western Australia: Newmanns Rocks [Newman Rock, Eyre Highway, 75 km W of Balladonia], 140 km E of Norseman, 12 Mar. 1979, *O.H. Volk 61* (PERTH 9083707).

WA

Riccia sorocarpa Bisch.

Herbarium voucher: New South Wales: Tom Groggin Road, about 1 km south from junction with Kybeyan South Fire Trail on way to Nimmitabel, 29 Aug. 2020, *R.W. Purdie 12108* (CANB 918569.1).

WA, **NT, SA**, **Qld, NSW**, **ACT**, **Vic.**, **Tas.**

Riccia spongiosula Na-Thalang

Ref.: Na-Thalang 1980 (tax.)

Herbarium voucher: New South Wales: Warrumbungle National Park, White Gum lookout car park, 24 km by road W of Coonabarabran, 12 May 2005, *J.A. Curnow* 6525 (CANB 889949.1).

State records include unpublished data from D.C. Cargill.

SA, NSW, **ACT**, **Vic., Tas.**

Riccia subbifurca Warnst. ex Croz.

Ref.: Jovet-Ast 2000 (tax., dist.)

Herbarium voucher: Australian Capital Territory: Black Mountain, Plant Industry CSIRO site, on the grounds outside of the vascular herbarium, 30 Aug. 2013, *D.C. Cargill* 925 (CANB 899028.1).

State records include unpublished data from D.C. Cargill.

WA, **SA**, **Qld**, **NSW**, **ACT**, **Vic.**, **Tas.**

Riccia tasmanica Steph. ex Rodway

Ref.: Rodway 1916 [1917] (tax.)

Herbarium voucher: Tasmania: Knocklofty, Hobart, 20 Jul. 1901, *L. Rodway* (HO 87841).

Tas.

Riccia verrucosa Cargill

Ref.: Cargill et al. 2021 (tax.)

Herbarium voucher: Northern Territory: Fish River Station, 25 Apr 2012, *D.C. Cargill 1277, p.p.* (CANB 811408).

NT

Riccia vesiculosa (Carrington & Pearson) Steph.

≡ *Riccia bullosa* var. *vesiculosa* Carrington & Pearson

Ref.: Cargill et al. 2021 (tax.)

Herbarium voucher: New South Wales: Goonoo National Park, east of Mogriguy, along side road north of Mogriguy Forest Road, 7 Nov. 2020, *R.W. Purdie 12322* (CANB 921154.1).

WA, **SA**, **NT**, **Qld**, **NSW**, **Vic.**

Riccia victoriensis Steph.

The status of this species requires further investigation.

Vic.

Riccia weymouthiana Steph. ex Rodway

The status of this species requires further investigation.

Tas.

Ricciocarpos Corda

Ricciocarpos natans (L.) Corda

≡ *Riccia natans* L.

Ref.: Perold 1999 (tax.); Scott 1985 (dist.)

Herbarium voucher: New South Wales: Road from Tilpa to Tonga at Paroo Overflow crossing, 5 Jul. 2008, *R.W. Purdie 6729* (CANB 775507.1).

WA, **NT**, **SA**, **Qld, NSW**, **ACT**, **Vic.**, **Tas.**

Riella Mont.

Riella halophila Banwell

Ref.: Söderström et al. 2016 (tax.)

Herbarium voucher: Western Australia: Cricket Ground Lakes, 6 Oct. 2008, *T.D. Macfarlane 4436* (CANB 813239.1).

Vic., **WA, SA**

Riella spiculata J.Taylor

Ref.: Söderström et al. 2016 (tax.)

Herbarium voucher: Victoria: Darlots [=Darlot] Creek Sanctuary, Tyrendarra (Private Sanctuary), 15 Oct. 1952, *A.C. Beauglehole & R. Melville 4419* (MEL 1046060A).

Vic.

Saccogynidium Grolle

Saccogynidium decurvum (Mitt.) Grolle

≡ *Lophocolea decurva* Mitt.

= *Chiloscyphus asperrimus* Steph.

Ref.: Engel & Glenny 2019b (tax. dist)

Herbarium voucher: Tasmania: Gordon River Road near The Hermit, 18 Feb. 2018, *J. Jarman* (HO 591086).

Vic., **Tas.**

Saccogynidium muricellum (De Not.) Grolle

≡ *Chiloscyphus muricellus* De Not.

Herbarium voucher: Queensland: Track to Manjal Jimalji, between coral fern patch and split rock, Daintree National Park, 30 Aug. 2014, *L.J. Gray & M.A.M. Renner 7283* (NSW 1061587).

Qld

Scapania (Dumort.) Dumort., *nom. cons.*

≡ *Radula sect. Scapania* Dumort.

Scapania ampliata Steph.

Scapania ampliata subsp. **queenslandica** M.L.Hicks

Herbarium voucher: Queensland: Bellenden Ker Range, Russell River catchment, track to Choorichillum from end of Gourka Road, between NW summit and Choorichillum, Wooroonooran National Park, 30 Mar. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 6430* (NSW 896969).

Qld

Schiffneriolejeunea Verd.

Schiffneriolejeunea pulopenangensis (Gottsche) Gradst.

≡ *Phragmicoma pulopenangensis* Gottsche

Ref.: Thiers & Gradstein 1989 (tax., dist.)

Herbarium voucher: Queensland: *H. Streimann 31206* (CANB).

Qld

Schiffneriolejeunea tumida (Nees) Gradst.

≡ *Ptychanthus tumidus* Nees

Ref.: Thiers & Gradstein 1989 (tax., dist.)

Schiffneriolejeunea tumida var. **hasskarliana** (Gottsche) Gradst. & Terken

≡ *Phragmicoma hasskarliana* Gottsche

Ref.: Thiers & Gradstein 1989 (tax., dist.)

Herbarium voucher: Queensland: Big Tableland, 26 km S of Cooktown, 4 Jul. 1984, *H. Streimann 30710* (CANB 783792.1).

Qld

Schistochila Dumort.

Schistochila baileyana Steph.

Herbarium voucher: Queensland: Mt Bellenden Ker, just below radio transmitter pylon, under first cable- car pylon, Mount Bellenden Ker National Park, 7 Aug. 1995, *E.A. Brown, K.L. Radford & B.M. Wiecek 95/175* (NSW 390434).

Qld

Schistochila balfouriana (Hook.f. & Taylor) Steph.

≡ *Jungermannia balfouriana* Hook.f. & Taylor

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: Adamsons Peak Track, near carpark, 1 Mar. 1980, *A.V. Ratkowsky H1684* (HO 66792).

Tas.

Schistochila cristata Steph.

Herbarium voucher: Queensland: Eastern flank of Mount Lewis summit, headwaters of stream flowing SW to Mount Lewis road, Mount Lewis National Park, 29 Aug. 2014, *L.J. Gray & M.A.M. Renner 7261* (NSW 1061502).

Qld

Schistochila lehmanniana (Lehm. & Lindenb.) Carrington & Pearson

≡ *Jungermannia lehmanniana* Lehm. & Lindenb.

= *Gottschea hombroniana* Mont.

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: Florentine River, near Gordon River Road, 1 km W of junction with Scotts Peak Road, E of S end of Lake Gordon, 5 Mar. 1977, *J.J. Engel 15056* (CANB 769738.1).

Vic., **Tas.**

Schistochila pseudociliata R.M.Schust.

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: Lovers Falls, Pieman River, 4 Feb. 2015, *L.H. Cave 2676* (HO 578857).

Tas.

Schistochila tasmanica Steph.

Ref.: Engel & Glenny 2019b (tax., dist.)

Herbarium voucher: Tasmania: Weindorfers Forest, near Hounslow Heath Track, 2 Feb. 1977, *J.J. Engel 13909* (HO 90683).

Tas.

Schizophyllopsis Váňa & L.Söderstr.

Ref.: Váňa et al. 2013d (tax.)

Schizophyllopsis bidens (Reinw., Blume & Nees) Váňa & L.Söderstr.

≡ *Jungermannia bidens* Reinw., Blume & Nees

Anastrophyllum bidens (Reinw., Blume & Nees) Steph.

Ref.: Váňa et al. 2013d (tax.); Váňa & Piippo 1989 (dist.)

Qld

Seppeltia Grolle

Ref.: Grolle & Seppelt 1986 (tax.)

Seppeltia succuba Grolle

Ref.: Grolle & Seppelt 1986 (tax., dist.)

Herbarium voucher: Macquarie Island: NW side of Green Gorge basin near mouth of small fern gully, in damp short tussock grassland of *Festuca, Agrostis*, 10 Nov 1984, *R.D. Seppelt 14701* (HO).

Macquarie I.

Siphonolejeunea Herzog

= *Nephelolejeunea* Grolle

= *Siphonolejeunea* subg. *Austrolejeunea* R.M.Schust.

= *Austrolejeunea* (R.M.Schust.) R.M.Schust.

Ref.: Renner & de Lange 2020 (tax.)

Siphonolejeunea bidentata (B.M.Thiers) M.A.M.Renner

≡ *Nephelolejeunea bidentata* (B.M.Thiers) L.Söderstr. & A.Hagborg

Austrolejeunea bidentata B.M.Thiers

Ref.: Renner & de Lange 2020 (tax.); Thiers 1985 (dist.)

Herbarium voucher: New South Wales: Devils Hole Lookout, Barrington Tops National Park, 15 Dec. 2011, *M.A.M. Renner 5873* (NSW 898651).

NSW, Tas.

Siphonolejeunea elegantissima (Steph.) Grolle

≡ *Trachylejeunea elegantissima* Steph.

Ref.: Renner & de Lange 2020 (tax.); Grolle 1976 (dist.)

Herbarium voucher: New South Wales: Coombadjha Stream catchment, Washpool walk. c. 150 m uphill from junction with short loop track, Washpool National Park, 11 Apr. 2011, *M.A.M. Renner 5233* (NSW 875779).

Qld, **NSW**, **Vic.**

Siphonolejeunea hamata (Grolle) M.A.M.Renner

≡ *Nephelolejeunea hamata* Grolle

Austrolejeunea hamata (Grolle) Pócs

Ref.: Renner & de Lange 2020 (tax.); Grolle 1980b (dist.)

Herbarium voucher: Victoria: Wilsons Promontory National Park, Whiskey Bay, 1 Dec. 1993, *A.W. Thies 1593A* (MEL 0234672A).

Vic., **Tas.**

Siphonolejeunea jarmaniana (Grolle) M.A.M.Renner

≡ *Austrolejeunea jarmaniana* Grolle

Nephelolejeunea jarmaniana (Grolle) L.Söderstr. & A.Hagborg

Ref.: Renner & de Lange 2020 (tax.); Grolle 1992 (dist.)

Herbarium voucher: Tasmania: near the southern end of Romney Marsh, *J. Jarman 90/4* (JE 04002945; Herb. Jarman).

Tas.

Siphonolejeunea nudipes (Hook.f. & Taylor) Herzog

≡ *Jungermannia nudipes* Hook.f. & Taylor

Austrolejeunea nudipes (Hook.f. & Taylor) Grolle

= *Microlejeunea victoriensis* D.J.Carr

Ref.: Renner & de Lange 2020 (tax.)

Herbarium voucher: Tasmania: Blue Tier: Halls Falls, 3 Sep. 2013, *T. Thekathyil M2* (NSW 999298).

Qld, **NSW**, **Vic.**, **Tas.**

Siphonolejeunea occidentalis (Pócs) M.A.M.Renner

≡ *Austrolejeunea occidentalis* Pócs

Ref.: Renner & de Lange 2020 (tax.); Pócs 2006 (dist.)

Herbarium voucher: Western Australia: Denmark Shire, Giant Forest block, 16 June 2000, *B.G. Hammersley 2498* (PERTH).

WA

Siphonolejeunea olgae R.M.Schust.

≡ *Austrolejeunea olgae* (R.M.Schust.) R.M.Schust.

Ref.: Renner & de Lange 2020 (tax.); Grolle 1980b (dist.)

Herbarium voucher: Tasmania: F8 East Road, Growling Swallet and track to Growling Swallet, Mount Field National Park, 4 Dec. 2007, *M.A.M. Renner 3080* (NSW 1051793).

Tas.

Siphonolejeunea schiffneri (Steph. ex Schiffn.) Herzog

≡ *Pycnolejeunea schiffneri* Steph. ex Schiffn.

Ref.: Renner & de Lange 2020 (tax.)

Herbarium voucher: Queensland: Track to Cloudy Creek, Paluma Range National Park, *M.A.M.Renner 1593 & E.A.Brown* (NSW 1004498).

Qld

Solenostoma Mitt., *nom. cons.*

Ref.: Crandall-Stotler et al. 2009b (tax.)

Solenostoma hasskarliana (Nees) R.M.Schust. ex Váňa & D.G.Long

≡ *Alicularia hasskarliana* Nees

Jungermannia hasskarliana (Nees) Mitt.

Ref.: Váňa & Long 2009 (tax.); Shaw et al. 2015 (dist.)

Herbarium voucher: Queensland: *T. Pócs & H. Streimann 99111/v* (EGR).

Qld

Solonostoma infuscum (Mitt.) Hentschel

≡ *Plectocolea infusca* Mitt.

Ref.: Pócs & Streimann 2006 (dist.)

Herbarium voucher: Queensland: Daintree National Park, Cape Tribulation road near Noah Creek, 35 km NNE of Mossman. 5–10 m alt, lowland rainforest, on riverside earth bank, *T. Pócs 9993/B* (EGR).

Qld

Solenostoma inundatum (Hook.f. & Taylor) Mitt. ex Steph.

≡ *Jungermannia inundata* Hook.f. & Taylor

= *Aplozia victoriensis* Bibby

Ref.: Engel & Glenny 2008 (tax.)

Herbarium voucher: Tasmania: near Longley, on Sandfly Road, 7 May 2011, *J. Jarman* (HO 562323).

Qld, **NSW**, **Vic.**, **Tas.**, **Macquarie I.**

Solenostoma montanum (Steph.) Váňa

≡ *Nardia montana* Steph.

= *Plectocolea eenii* S.W.Arnell

= *Jungermannia wattsiana* Steph.

Solenostoma wattsianum (Steph.) R.M.Schust. ex Váňa, Hentschel & Heinrichs

Jungermannia karsteniana Beauverd

Herbarium voucher: New South Wales: Head of Wilson's Creek, [Richmond River], without date, *W.W. Watts Hepat 336* (NSW 763372).

Qld, **NSW**, **Lord Howe I.**

Solenostoma obliquifolium (Schiffn.) R.M.Schust. ex Váňa, Hentschel & Heinrichs

≡ *Nardia obliquifolia* Schiffn.

Jungermannia obliquifolia (Schiffn.) Váňa

Ref.: Váňa et al. 2010 (tax.)

Herbarium voucher: Queensland: Main Coast range, Mossman Gorge area 4–5 km W of Mossman town. Rex Creek, Daintree River National Park, 26 Aug. 1999, *T. Pócs & H. Streimann 9987*/E (NSW 903537).

Qld

Solenostoma orbiculatum (Colenso) R.M.Schust.

≡ *Gymnomitrion orbiculatum* Colenso

= *Jungermannia cambewarrana* Steph.

= *Jamesoniella fragilis* Steph.

Jungermannia fragilis Gottsche, *nom. illeg.*

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Australian Capital Territory: Namadgi National Park, Head of Ginnini [Ginini] Falls, 29 Nov. 2018, *D.C. Cargill 1601* (CANB 909627.1).

Qld, **NSW**, **ACT**, **Vic.**, **Tas.**

Solenostoma tetragonum (Lindenb.) R.M.Schust. ex Váňa & D.G.Long

= *Jungermannia tetragona* Linden.

Ref.: Meagher 2007a

Qld

Solenostoma truncatum (Nees) R.M.Schust. ex Váňa & D.G.Long

≡ *Jungermannia truncata* Nees

Ref.: Li & Váňa 2015 (tax., dist.)

Herbarium voucher: Queensland: Clarke Range, 70 km W of Mackay, at the corner of Dalrymple and Black Roads, 4 km ENE of Eungella, 910 m alt., *T. Pócs 9969/J* (EGR).

Qld

Sphaerocarpos Boehm.

Ref.: Crandall-Stotler et al. 2009b (tax.)

Sphaerocarpos texanus Austin

Herbarium voucher: New South Wales: Jerrawa [near railway line; ENE of Yass], Jul. 1975, *H.J. Hewson 893* (CANB 398303.1).

SA, **NSW**, **Vic.**

Spruceanthus Verd.

Spruceanthus planiusculus (Mitt.) X.Q.Shi, R.L.Zhu & Gradst.

≡ *Lejeunea planiuscula* Mitt.

Ptychocoleus planiusculus (Mitt.) Verd.

Archilejeunea planiuscula (Mitt.) Steph.

Ref.: Shi et al. 2015 (tax.); Thiers & Gradstein 1989 (dist.)

Herbarium voucher: Queensland: Slopes of Black Mountain, 25 km NW of Kuranda, 7 Jul. 1984, *H. Sreimann 31117* (CANB 611182.1).

NT, Qld NSW

Spruceanthus polymorphus (Sande Lac.) Verdoorn

≡ *Phragmicoma polymorpha* Sande Lac.

Archilejeunea polymorpha (Sande Lac.) B.M.Thiers & Gradst.

Ref.: Shi et al. 2015 (tax.); Thiers & Gradstein 1989 (dist.)

Herbarium voucher: Queensland: Mount Lewis road, Mount Lewis Forest Reserve, 13 Jul. 2005, *E.A. Brown & M.A.M. Renner 2131* (NSW1005177).

Qld, NSW, Lord Howe I., Norfolk I.

Spruceanthus semirepandus (Nees) Verd.

≡ *Jungermannia semirepanda* Nees

Herbarium voucher: Queensland: Near Cannanbullen Falls, Millaa-Millaa area, 3 Jul. 1983, *M.L. Hicks 11521* (BRI AQ0717093).

Qld, NSW

Spruceanthus thozetianus (Gottsche & F.Muell.) B.M.Thiers & Gradst.

≡ *Phragmicoma thozetiana* Gottsche & F.Muell.

= *Phragmicoma eavesiana* Gottsche & F.Muell.

= *Brachiolejeunea plagiochiloides* Steph. & Spruce ex Steph.

= *Mastigolejeunea phaea* Gottsche ex Schiffn.

= *Brachiolejeunea robusta* Steph.

Archilejeunea robusta (Steph.) Verd.

= *Phragmicoma keppelina* Gottsche & F.Muell., *nom. inval.*

= *Brachiolejeunea brotheri* Steph. ex Bonner, *nom. inval.*

= *Brachiolejeunea plagiochiloides* Steph. & Spruce, *nom. inval.*

Ref.: Thiers & Gradstein 1989 (tax., dist.)

Herbarium voucher: New South Wales: Tianjara Falls, Tianjara Creek, 30 km NW of Ulladulla, 21 Jun. 1979, *H. Streimann 7809* (CBG 7909212.1).

Qld, NSW

Stictolejeunea (Spruce) Schiffn.

≡ *Lejeunea* subg. *Stictolejeunea* Spruce

Ref.: Thiers & Gradstein 1989 (tax.)

Stictolejeunea balfourii (Mitt.) E.W.Jones

≡ *Lejeunea balfourii* Mitt.

Stictolejeunea balfourii var. **balfourii**

= *Stictolejeunea richardsii* Herzog

Ref.: Thiers & Gradstein 1989 (tax., dist.)

Herbarium voucher: Queensland: Tributary of Babinda Stream upstream of Goldfields track bridge, Wooroonooran National Park, 9 Sep. 2018, *M.A.M. Renner, L. Shu & R-L. Zhu 8906* (NSW 1052747).

Qld

Stolonivector J.J.Engel

Ref.: Engel & Glenny 2019a (tax.)

Stolonivector obtusilobus J.J.Engel

Ref.: Engel & Glenny 2019a (tax.); Engel 2015 (dist.)

Tas.

Symphyogyna Nees & Mont.

Symphyogyna hymenophyllum (Hook.) Nees et Mont.

≡ *Jungermannia hymenophyllum* Hook.

Ref.: Campbell et al. 1993 (tax.)

Symphyogyna hymenophyllum was listed in synonymy of *S. podophylla* by McCarthy (2003), though Campbell et al. (1993) had demonstrated that *S. hymenophyllum* and *S. podophylla* were separate species, circumscribed by differences in spore morphology and chemistry, a result compatible with the molecular phylogenetic results of Mamontov et al. (2021) who recovered *S. hymenophyllum* and *S. bogotensis* as supported sister species, with *S. podophylla* sister to the lineage comprising those two species. Campbell et al. (1993) attributed to *S. podophylla* an Australian, South American, and South African distribution, and to *S. hymenophyllum* a distribution in New Zealand, the implication being that *S. hymenophyllum* is a New Zealand endemic and therefore does not occur in Australia. While the evidence presented by Campbell et al. (1993) definitely supports the recognition of two species, their sample size and inspection of Australian specimens was not sufficient to warrant definite exclusion of *S. hymenophyllum* from Australia. Unpublished data suggests that both species co-occur in southern temperate South America. Until the absence of *S. hymenophyllum* from southern temperate Australia has been confirmed, we regard this species as present in Australia, with doubt. The specific epithet '*hymenophyllum*' is a noun in apposition.

?Austr.

Symphyogyna interrupta Carrington & Pearson

Herbarium voucher: New South Wales: Mossmans Bay [Mosman Bay], Aug. 1884, *T.W. Whitelegge s.n.* (NSW 416000).

NSW, Vic., Tas.

Symphyogyna irregularis Steph.

Herbarium voucher: New South Wales: Shaws Bay, Ballina, 24 Jan. 1903, *W.W. Watts Hepat 799* (NSW 763149).

NSW, Qld

Symphyogyna lacerosquama Steph.

Herbarium voucher: New South Wales: Shaws Bay [East Ballina], Sep. 1901, *W.W. Watts Hepat 306* (NSW 763179).

NSW

Symphyogyna multiflora Steph.

Herbarium voucher: New South Wales: Valley of Waters [nr Wentworth Falls], Sep. 1912, *W.W. Watts 1127* (NSW 251572).

NSW

Symphyogyna podophylla (Thunb.) Mont. & Nees

≡ *Jungermannia podophylla* Thunb.

= *Jungermannia obovata* Hook.f. & Taylor

= *Jungermannia rhizobola* Schwägr.

= *Symphyogyna pulchra* Taylor

Herbarium voucher: New South Wales: Mongarlowe River, 22 km SE of Braidwood, 21 Nov. 1979, *H. Streimann 9556* (CBG 8000336.1).

WA, SA, Qld, NSW, ACT, Vic., Tas., Norfolk I.

Symphyogyna rhodina (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

≡ *Jungermannia rhodina* Hook.f. & Taylor

Herbarium voucher: New South Wales: Deep Creek (race), Batlow, 2 Mar. 1904, *W.W. Watts NSW 787* (NSW 763074).

NSW, Tas.

Symphyogyna semi-involucrata Austin

Herbarium voucher: New South Wales: Valley [of the] Waters, Sep. 1912, *W.W. Watts NSW 1112* (NSW 763076).

NSW

Syzygiella Spruce

= *Jungermannia* subg. *Jamesoniella* Spruce

Jamesoniella (Spruce) Carrington

= *Cryptochila* R.M.Schust.

Ref.: Feldberg et al. 2010b (tax.)

Syzygiella colorata (Lehm.) Feldberg, Váňa, Hentsche & Heinrichs

≡ *Jungermannia colorata* Lehm.

Jamesoniella colorata (Lehm.) Spruce ex Schiffn.

Ref.: Feldberg et al. 2010b (tax.); Engel & Glenny 2008 (dist.)

Herbarium voucher: Tasmania: Vale of Belvoir, 14 Mar. 2010, *L.H. Cave 1106* (HO 555906).

WA, **NSW**, **ACT**, **Vic.**, **Tas.**, **Macquarie I.**

Syzygiella sonderi (Gottsche) Feldberg, Váňa, Hentsche & Heinrichs

≡ *Jungermannia sonderi* Gottsche

= *Jungermannia grandiflora* Lindenb. & Gottsche

Cryptochila grandiflora (Lindenb. & Gottsche) Grolle

Ref.: Feldberg et al. 2010b (tax.); Engel & Glenny 2008 (dist.)

Herbarium voucher: Tasmania: Southwest Wilderness: Gordon Road, Lake Pedder, Teds Beach, 14 May 2008, *R.D. Seppelt 26872* (HO 573414).

NSW, **Vic.**, **Tas.**, **Macquarie I.**

Syzygiella tasmanica (Hook.f. & Taylor) K.Feldberg, Váňa, Hentschel & Heinrichs

≡ *Jungermannia tasmanica* Hook.f. & Taylor

Jamesoniella tasmanica (Hook.f. & Taylor) Steph.

= *Jungermannia revolvens* Hook.f. & Taylor

= *Leioscyphus heterophyllus* Steph.

= *Jamesoniella stephaniana* Beauverd

= *Plagiochila carnosa* Herzog

= *Jamesoniella cambewarrana* Steph.

= *Jamesoniella robusta* Steph., *nom. illeg.*

Ref.: Feldberg et al. 2010b (tax.); Engel & Glenny 2008 (dist.)

Herbarium voucher: Queensland: Coomera River catchment, MacPherson Range, O'Reillys, Bithongabel, Lamington National Park, 5 Mar. 2014, *A.E. Orme & M.A.M. Renner 6816* (NSW 850861).

SA, **Qld**, **NSW**, **Vic.**, **Tas.**

Syzygiella teres (Carrington & Pearson) Váňa

≡ *Jungermannia teres* Carrington & Pearson

Herzogobryum teres (Carrington & Pearson) Grolle

Ref.: Váňa et al. 2013g (tax.); Engel & Glenny 2008 (dist.)

Herbarium voucher: New South Wales: Etheridge Range, near Mt Kosciusko, Dec. 1965, *D. McVean* 265117 (CBG 9309661.1).

NSW, **Vic.**, **Tas. Macquarie I**

Targionia L.

Targionia hypophylla L.

= *Targionia michelii* Corda

Ref.: McCarthy 2003 (dist.)

Herbarium voucher: South Australia: Southern Flinders Ranges. Heyson Trail, Waukarie Creek off Flinders Ranges Way between Saltia and Quorn, near Woolshed Flats not far from creek and bridge, 21 Aug. 2016, *D.C. Cargill 1306SA* (CANB 894962.1).

WA, **SA**, **Qld**, **NSW**, **ACT**, **Vic.**, **Tas.**

Targionia lorbeeriana Müll. Frib.

Ref.: Scott & Pike 1988 (tax., dist.)

Herbarium voucher: Australian Capital Territory: Black Mountain, 5 km NW of Canberra, 15 Jun. 1980, *H. Streimann* 10346 (CBG 8004557.1).

Scott & Pike (1988) identified two morphotypes within Australian *Targionia*, which differ in spore ornamentation, and attributed these to *T. hypophylla* and *T. lorbeeriana*. As part of an investigation of European and Atlantic *Targionia*, Boisselier-Dubayle & Bischler (1999) examined one of these Australian morphotypes, which was triploid (n=27). Boisselier-Dubayle & Bischler (1999) concluded that the European triploid plants were derived via auto- and allo-polyploidisation, from the haploid cytotype and an unknown diploid autopolyploid. They also concluded that the Australian cytotype had an independent origin from those of Europe and the Atlantic Islands. While Boisselier-Dubayle & Bischler (1999) noted morphological differences between European and Australasian plants in the production of male branches (terminal in the New Zealand colony, ventral in the European plants), their isozyme sampling and investigation of morphology were limited to two Australasian colonies, one from Australia the other from New Zealand. The types of both *T. hypophylla* and *T. lorbeeriana* are from Italy and Sicily and, given the results of Boisselier-Dubayle & Bischler (1999) on the one hand and Scott & Pike (1988) on the other, it is reasonable to infer the presence of two species in Australia, one or both of which may be different species to those occurring in Europe. Further work on the genus *Targionia* in Australia is required.

WA, **SA**, **Vic.**, **NSW**, **ACT**

Telaranea Spruce ex Schiffn.

Ref.: Cooper et al. 2013 (tax.)

Telaranea fragilifolia (R.M.Schust.) J.J.Engel & G.L.Merr.

≡ *Kurzia fragilifolia* R.M.Schust.

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Manuka Road, 7 Apr. 1999, *J. Jarman 99/2* (HO 565136).

Tas.

Telaranea herzogii (E.A.Hodgs.) E.A.Hodgs.

≡ *Lepidozia herzogii* E.A.Hodgs.

= *Lepidozia bisetula* Herzog, *nom. illeg.*

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Lovers Falls, Pieman River, 4 Feb. 2015, *L.H. Cave 2697* (HO 579947).

Queensland records of this species should be re-examined.

NSW, **Vic.**, **Tas.**.

Telaranea inaequalis R.M.Schust. ex J.J.Engel & G.L.Merr.

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Gordon River, Sir John Falls, just up river from Butler Island, 25 Feb. 1977, *J.J. Engel* 14685B (HO 571636).

Tas.

Temnoma Mitt.

Ref.: Engel & Glenny 2008 (tax.)

Temnoma palmatum (Lindb. ex Pearson) R.M.Schust.

≡ *Blepharostoma palmatum* Lindb. ex Pearson

Ref.: Engel & Glenny 2008 (tax.)

Temnoma palmatum var. **palmatum**

Ref.: Engel & Glenny 2008 (tax., dist.)

NSW, Vic., Macquarie I.

Temnoma quadripartitum (Hook.) Mitt.

≡ *Jungermannia quadripartita* Hook.

Ref.: Engel & Glenny 2008 (tax.)

Temnoma quadripartitum var. **quadripartitum**

Ref.: Engel & Glenny 2008 (tax.)

Temnoma quadripartitum has three recognised varieties, but to which of these the Macquarie Island plant belonged was not stated by Váňa et al. (2015). We infer they represent the typical variety, by implication and because *Temnoma quadripartitum var. quadripartitum* is the most widespread and occurs elsewhere in the Australasian Subantarctic region, on Campbell Island.

Macquarie I.

Temnoma townrowiorum R.M.Schust.

Ref.: Meagher 2020 (tax.)

Originally published with the epithet '*townrowii*', but commemorating two Townrows, which is correctible without conservation in accordance with Art. 60.8(note 4).

NSW, ACT, Vic.

Tetracymbaliella Grolle

Tetracymbaliella decipiens (Gottsche) Grolle

≡ *Chiloscyphus decipiens* Gottsche

Heteroscyphus decipiens (Gottsche) J.J.Engel & R.M.Schust.

= *Chiloscyphus inflatistipulus* Steph.

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: Tasmania: Anthony Road, 3 Feb. 1989, *J. Jarman* (HO 547788).

The type of *Chiloscyphus inflatistipulus* was collected from 'Australia felix' likely in reference to eastern Victoria.

Vic., Tas.

Tetracymbaliella subsimplex (Austin) J.J.Engel

≡ *Polyotus subsimplex* Austin

= *Tetracymbaliella rodwayana* Grolle

Ref.: Engel & Glenny 2019a (tax., dist.)

Herbarium voucher: Tasmania: Mt Kate, 18 Jan. 1997, *A. Moscal* (HO 593589).

Tas.

Thysananthus Lindenb.

Ref.: Sukkharak & Gradstein 2017 (tax.)

Thysananthus australis (Steph.) B.M.Thiers & Gradst.

≡ *Archilejeunea australis* Steph.

Ref.: Thiers & Gradstein 1989 (tax., dist.)

Herbarium voucher: New South Wales: Minyon Falls, 25 km NNE of Lismore, 17 Oct. 1978, *H. Streimann 6913* (CBG 7905860.1).

Treated as a synonym of *Thysananthus retusus* by Sukkharak & Gradstein (2017), however we prefer to recognise *T. australis* as distinct from *T. retusus* to reflect the presence of two distinct morphotypes of consistent expression in Queensland, corresponding with these entities as circumscribed by Thiers & Gradstein (1989).

Qld

Thysananthus calcaratus (Steph.) Sukkharak & Gradst.

≡ *Archilejeunea calcarata* Steph.

Mastigolejeunea calcarata (Steph.) Verd.

Ref.: Sukkharak & Gradstein 2017 (tax.); Thiers & Gradstein 1989 (dist.)

Herbarium voucher: Queensland: Dryander Stream, Mt Dryander, above Patulla Road, 24 Jun. 2005, *M.A.M. Renner 1569* (NSW 796788).

Qld, NSW

Thysananthus convolutus Lindenb.

Herbarium voucher: Queensland: Mt Lewis, 29 Aug. 1982, *M.L. Hicks 11113* (BRI AQ0538953).

Thysananthus convolutus is reported for Australia here based on a specimen collected by *M.L. Hicks 11113*, and determined by S.R. Gradstein.

Qld

Thysananthus frauenfeldii Reichardt

= *Mastigolejeunea undulata* Gradst. & Grolle

Ref.: Sukkharak & Gradstein 2017 (tax.); Thiers & Gradstein 1989 (dist.)

Herbarium voucher: Queensland: Thornton Peak, track to summit from Hilda Creek, on summit plateau, stream down from camp, Daintree National Park, 17 Aug. 2017, *M.A.M. Renner , A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys* 8620 (NSW 1061150).

Qld

Thysananthus fruticosus (Lindenb. & Gottsche) Schiffn.

≡ *Dendrolejeunea fruticosa* (Lindenb. & Gottsche) Lacout.

Ref.: Sukkharak & Gradstein 2017 (tax.); Thiers & Gradstein 1989 (dist.)

Herbarium voucher: Norfolk Island: *I. Robinson* (MEL 1038170A).

Qld, Norfolk I.

Thysananthus humilis (Gottsche) Sukkharak & Gradst.

≡ *Phragmicoma humilis* Gottsche

Mastigolejeunea humilis (Gottsche) Schiffn.

Ref.: Sukkharak & Gradstein 2017 (tax.)

Recently recorded from Lord Howe Island, by D.A. Meagher.

Lord Howe I.

Thysananthus indicus (Steph.) Sukkharak & Gradst.

= *Thysananthus integrifolius* Steph.

≡ *Mastigolejeunea indica* Steph.

Ref.: Sukkharak & Gradstein 2017 (tax.); Thiers & Gradstein 1989 (dist.)

Herbarium voucher: Queensland: Conway NP picnic area; near Proserpine, Conway Range National Park, 23 Jun. 2005, *M.A.M. Renner 1546* (NSW 796785).

NT, Qld

Thysananthus ligulatus (Lehm. & Lindenb.) Sukkharak & Gradst.

≡ *Jungermannia ligulata* Lehm. & Lindenb.

Mastigolejeunea ligulata (Lehm. & Lindenb.) Schiffn.

= *Mastigolejeunea wattsiana* Steph.

Ref.: Sukkharak & Gradstein 2017 (tax.); Thiers & Gradstein 1989 (dist.)

Herbarium voucher: New South Wales: Wallaces Road [Locality not found on any maps or gazetteer.], *W.W. Watts* (MEL 0630266A).

Qld, NSW

Thysananthus repletus (Taylor) Sukkharak & Gradstein

= *Lejeunea repleta* Taylor

= *Mastigolejeunea repleta* (Taylor) A.Evans

Ref.: Sukkharak & Gradstein 2017 (tax.); Sukkharak & Gradstein 2014 (dist.)

Herbarium voucher: Queensland: Mt. Archer Environmental Park, 7km NE of Rockhampton, 25 Aug. 1993, *H. Streimann & T. Hallingbäck 52360A* (JE).

Qld

Thysananthus retusus (Reinw., Blume & Nees) B.M.Thiers & Gradst.

≡ *Jungermannia retusa* Reinw., Blume & Nees

= *Thysananthus planus* Sande Lac.

Ref.: Thiers & Gradstein 1989 (dist.)

Herbarium voucher: Queensland: Thornton Peak, track to summit from Hilda Creek, on summit plateau, Daintree National Park, 17 Aug. 2017, *M.A.M. Renner, A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys 8587* (NSW 1061109).

Qld

Thysananthus spathulistipus (Reinw., Blume & Nees) Lindenb.

≡ *Jungermannia spathulistipa* Reinw., Blume & Nees

Ref.: Thiers & Gradstein 1989 (tax., dist.)

Herbarium voucher: Queensland: The Boulders rainforest reserve along Babinda Creek, 5 km W of Babinda town, 25 Aug. 1999, *T. Pócs & H. Streimann 9983*/L (NSW 903476).

Qld

Thysananthus virens Angstr.

≡ *Mastigolejeunea virens* (Angstr.) Steph.

Ref.: Sukkharak & Gradstein 2017 (tax.); Thiers & Gradstein 1989 (dist.)

Herbarium voucher: Queensland: Dryander Stream, Mt Dryander, above Patulla Road, 26 Jun. 2005, *M.A.M. Renner 1569* (NSW 796815).

Qld, NSW

Treubia K.I.Goebel, *nom. cons.*

Ref.: Crandall-Stotler et al. 2009b (tax.)

Treubia lacunosa (Colenso) Prosk.

≡ *Noteroclada lacunosa* Colenso

Ref.: Schuster & Scott 1969 (tax., dist.)

Herbarium voucher: Tasmania: Huon River, 28 Mar. 2015, *J. Jarman* (HO 578150).

Vic., Tas.

Treubia tasmanica R.M.Schust. & G.A.M.Scott

Ref.: Schuster & Scott 1969 (tax., dist.)

Herbarium voucher: Tasmania: Southwest Wilderness, Gordon Road, 41 km W of Maydena, 5 Dec. 2007, *R.D. Seppelt 26769* (HO 547427).

Vic., Tas.

Triandrophyllum Fulford & Hatcher

Ref.: Engel & Glenny 2008 (tax.)

Triandrophyllum subtrifidum (Hook.f. & Taylor) Fulford & Hatcher

≡ *Jungermannia subtrifida* Hook.f. & Taylor

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Growling Swallet, Mt Field National Park, 15 Feb. 2008, *P.J. Dalton 8.18* (HO 552615).

Vic., Tas., Macquarie I.

Trichocolea Dumort., *nom. cons.*

Trichocolea hatcheri E.A.Hodgs.

Ref.: Engel & Glenny 2008 (tax.)

Herbarium voucher: Queensland: Road to Mount Lewis, Mount Lewis NP, 23 Nov. 2014, *A.J. Franks AJF1411021* (BRI AQ0909977).

Qld

Trichocolea mollissima (Hook.f. & Taylor) Gottsche

= *Jungermannia tomentella* var. *javanica* Reinw., Blume & Nees

≡ *Jungermannia mollissima* Hook.f. & Taylor

= *Trichocolea australis* Steph.

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Arve Valley, 4 Dec. 1988, *A.J. Downing* (HO 119107).

Queensland records should all be checked for misidentifications of *Trichocolea pluma*.

Qld, NSW, Vic., Tas., Lord Howe I.

Trichocolea pluma (Reinw., Blume & Nees) Mont.

≡ *Jungermannia pluma* Reinw., Blume & Nees

Herbarium voucher: Queensland: Thornton Peak, track to summit on western flank from Hilda Creek, on summit plateau, Daintree National Park, 14 Aug. 2017, *M.A.M. Renner, A.R. Field, T. Hawkes, L. Mulkearns & S. Worboys 8465* (NSW 1060834).

Qld, Lord Howe I.

Trichocolea rigida R.M.Schust.

Ref.: Engel & Glenny 2008 (tax.)

NSW, Vic., Tas., Macquarie I.

Tricholepidozia (R.M.Schust.) E.D.Cooper

≡ *Telaranea* subg. *Tricholepidozia* R.M.Schust.

Ref.: Cooper et al. 2013 (tax.)

Tricholepidozia jowettiana (H.A.Mill.) E.D.Cooper

≡ *Telaranea jowettiana* H.A.Mill.

Ref.: Cooper et al. 2013 (tax.)

Herbarium voucher: Norfolk Island: Mt Pitt, *Jowett 16* (MU)

Tricholepidozia jowettiana is a poorly known entity whose status and relationships to other Australaisan taxa require further study

Norfolk I.

Tricholepidozia lindenbergii (Gottsche) E.D.Cooper

≡ *Lepidozia lindenbergii* Gottsche

Telaranea lindenbergii (Gottsche) J.J.Engel & G.L.Merr.

Mastigophora lindenbergii (Gottsche) Trevis.

Ref.: Cooper et al. 2013 (tax.)

Tricholepidozia lindenbergii var. **lindenbergii**

Ref.: Cooper et al. 2013 (tax.)

Herbarium voucher: Lord Howe Island: Mount Gower, 1 Aug. 1911, *W.W. Watts LHI 68* (NSW 763602).

Lord Howe I.

Tricholepidozia pulcherrima (Steph.) E.D.Cooper

≡ *Lepidozia pulcherrima* Steph.

Telaranea pulcherrima (Steph.) R.M.Schust.

Ref.: Cooper et al. 2013 (tax.)

Tricholepidozia pulcherrima var. **mooreana** (Steph.) E.D.Cooper

≡ *Telaranea pulcherrima* var. *mooreana* (Steph.) J.J.Engel & G.L.Merr.

Lepidozia mooreana Steph.

Ref.: Cooper et al. 2013 (tax.); Engel & Glenny 2008 (dist.)

Herbarium voucher: Tasmania: Vale of Belvoir [GDA94 0407662 5399486], 16 Mar. 2010, *L.H. Cave 1221* (MEL 2341777A).

NSW, Vic., Tas.

Tricholepidozia quadriseta (Steph.) E.D.Cooper

≡ *Lepidozia quadriseta* Steph.

Telaranea quadriseta (Steph.) J.J.Engel & G.L.Merr.

= *Lepidozia quadricilia* Steph.

Telaranea quadricilia (Steph.) J.J.Engel & G.L.Merr.

Ref.: Cooper et al. 2013 (tax.); Engel & Smith Merrill 2004 (dist.)

Herbarium voucher: Queensland: Rainforest gully, approximately 535 m SW of Escarpment Break, Kroombit Tops National Park, 17 Dec. 2015, *A.J. Franks AJF1512087A* (BRI AQ0908900).

Qld, NSW

Trichotemnoma R.M.Schust.

Trichotemnoma corrugatum (Steph.) R.M.Schust.

≡ *Blepharostoma corrugatum* Steph.

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Serpentine River valley, just below (downstream) of the dam, S of Gordon River, 18 Feb. 1998, *J.E. Braggins 98055B* (HO 553571).

Tas.

Tuyamaella S.Hatt.

Tuyamaella serratistipa S.Hatt.

Herbarium voucher: Queensland: Gourka Road, between end of council maintained road and Bartle Frere trail head, Wooroonooran National Park, 11 Sep. 2018, *M.A.M. Renner, L. Shu & R-L. Zhu 8996* (NSW 1053546).

Qld

Vandiemenia Hewson

Vandiemenia ratkowskyana Hewson, as '*ratkowskiana*'

Type: Tasmania: Mt Wellington, Milles Track to Wellington Falls, 11 Jan. 1980, *A.V. Ratkowsky 80/119* (holotype: CBG 9500146.1 [missing from CANB]; lectotype, here designated: HO 304298).

Ref.: Söderström et al. 2016 (tax.); Hewson 1982 (dist.)

Herbarium voucher: Tasmania, near Thermal Springs at Hastings Cave State Reserve, Dec. 2004, *P.J. Dalton 19704, H. Tsubota & T. Furuki* (HIRO, CBM, F).

A previous attempt by Furuki & Dalton (2008) to designate the specimen *Dalton 19704 et al.* at HIRO as the epitype was not effective, due to a failure to cite details of the type which it supported (Turland *et al.* (2018), Art. 9.9).

Tas.

Wettsteinia Schiffn.

Wettsteinia inversa (Sande Lac.) Schiffn.

≡ *Plagiochila inversa* Sande Lac.

Ref.: Inoue 1988 (dist.)

Qld

Wettsteinia schusteriana Grolle

Ref.: Engel & Glenny 2008 (tax.)

Herbarium voucher: Tasmania: Wanderer River, ca 5 km from mouth, 8 Mar. 1985, *A. Moscal 10063D* (CANB 785130.1).

There is only one Australian record of *Wettsteinia schusteriana*, and the determiner is unknown. The record needs to be confirmed.

Tas.

Zoopsis (Hook.f. & Taylor) Hook.f. ex Gottsche, Lindenb. & Nees

≡ *Jungermannia* subg. *Zoopsis* Hook.f. & Taylor

Ref.: Engel & Glenny 2008 (tax.)

Zoopsis argentea (Hook.f. & Taylor) Hook.f. ex Gottsche, Lindenb. & Nees

≡ *Jungermannia argentea* Hook.f. & Taylor

Ref.: Engel & Glenny 2008 (tax.)

Zoopsis argentea var. **argentea**

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: Tasmania: Anthony Road, western Tasmania, 3 Feb. 1989, *J. Jarman* (HO 547805).

WA, Qld, NSW, Vic., Tas., Lord Howe I.

Zoopsis argentea var. **flagelliformis** (Colenso) R.M.Schust.

≡ *Zoopsis flagelliformis* Colenso

Ref.: Engel & Glenny 2008 (tax.)

Herbarium voucher: Lord Howe Island: Mount Gower; near 800 m mark on track, 13 Nov. 2000, *E.A. Brown, B.J. Conn, K.M. Downs & I.J. Hutton 2000/177* (NSW 448625).

Lord Howe I.

Zoopsis leitgebiana (Carrington & Pearson) Bastow

≡ *Cephalozia leitgebiana* Carrington & Pearson

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: New South Wales: Newnes State Forest, Rocky Creek off Garah Mountain Road, 4 Mar. 1990, *R.G. Coveny 14093 & P.D. Hind* (NSW 470405).

NSW, Vic., Tas.

Zoopsis liukiuensis Horik.

Herbarium voucher: Queensland: Mount Lewis Road c. 30 km from junction with Mossman - Mount Molloy Road (just beyond forestry hut), Mount Lewis State Forest, 10 Aug. 1995, *E.A. Brown, K.L. Radford & B.M. Wiecek* 95/278 (NSW 390538).

Qld, NSW

Zoopsis setigera K.I.Goebel

Herbarium voucher: Queensland: Mount Lewis, headwaters of Leichhardt Creek flowing down SW flanks of summit, Daintree National Park, 27 Mar. 2012, *E.A. Brown, V.C. Linis & M.A.M. Renner 6363* (NSW 896817).

Australian plants identified as *Zoopsis setigera* by Renner should be confirmed, though they agree with Schuster's concept of that species in that the ventral cortical cells are rectangular.

Qld

Zoopsis setulosa Leitg.

≡ *Cephalozia setulosa* (Leitg.) Spruce

Ref.: Engel & Glenny 2008 (tax., dist.)

Herbarium voucher: New South Wales: Morton National Park, Glow Worm Glen 2 km ESE of Bundanoon, 5 Jun. 1994, *H. Streimann 53598m*(CBG 9501628.1).

NSW, Vic., Tas., Lord Howe I.

List of names applied to hornworts and liverworts in Australia and their applications.

The following alphabetical list of names presents nomenclatural data for all names associated with the Australian flora, including those currently accepted as occurring here, their synonyms, and those excluded since McCarthy (2003), the last marked by #. Protologue information and original material, cited exactly as it appears in the protologue for older records are provided, the latter where this information was able to be accessed by the authors of this checklist. The absence of original material citations below simply means we have not seen the protologue to extract this information. In these instances, we have relied on other sources for the protologue citation itself.

Acrobolbus Nees, Synopsis Hepaticarum 1: 5 (1844)

Acrobolbus cinerascens (Lehm. & Lindenb.) Bastow, Papers and Proceedings of the Royal Society of Tasmania 1887: 242 (1888)

Basionym: *Jungermannia cinerascens* Lehm. & Lindenb.

Acrobolbus concinnus (Mitt.) Grolle, Botanical Magazine (Tokyo) 78: 79 (1965)

Basionym: *Gymnanthe concinna* Mitt.

Acrobolbus cyaneus Herzog, Revue Bryologique et Lichenologique 26: 59 (1957) = **Goebelobryum grossitextum** (Steph.) Grolle

Original material: "Westaustralien: Cowaramup, no 37; Darradup, 20 miles West of Nannup, no 74"

Acrobolbus epiphytus (Colenso) Briscoe, Phytotaxa 202: 59 (2015)

Basionym: *Marsupidium epiphytum* Colenso

Acrobolbus knightii (Mitt.) Briscoe, Phytotaxa 202: 59 (2015)

Basionym: *Marsupidium knightii* Mitt.

Acrobolbus ochrophyllus (Hook.f. & Taylor) R.M.Schust., Revue Bryologique et Lichenologique 30: 64 (1961)

Basionym: *Jungermannia ochrophylla* Hook.f. & Taylor

#Acrobolbus perpusillus (Colenso) Briscoe, Phytotaxa 202: 60 (2015)

Basionym: *Tylimanthus perpusillus* Colenso

Acrobolbus perpusillus does not occur in Australia (Engel and Glenny 2019).

Acrobolbus pseudosaccatus (Grolle) Briscoe, Phytotaxa 202: 60 (2015)

Basionym: *Tylimanthus pseudosaccatus* Grolle

Acrobolbus saccatus (Hook.) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 423 (1877)

Basionym: *Jungermannia saccata* Hook.

Acrobolbus saccatus is endemic to New Zealand (Engel and Glenny 2019). The few Victorian and Tasmanian records are attributable to other species, most likely *Acrobolbus pseudosaccatus*.

Acrobolbus setulosus (Mitt.) Briscoe, Phytotaxa 202: 60 (2015)

Basionym: *Gymnanthe setulosa* Mitt.

Acrobolbus spinifolius R.M.Schust., Journal of the Hattori Botanical Laboratory 90: 137 (2001)

Original material: Holotype: New Zealand, South Island, Haast Pass, *Schuster 84-416*.

Acrobolbus surculosus (Nees) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 423 (1877)

Basionym: *Scapania surculosa* Nees

Acrobolbus tenellus (Taylor ex Lehm.) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 423 (1877)

Basionym: *Gymnanthe tenella* Taylor ex Lehm.

Acrobolbus tenellus var. **diversifolius** (E.A.Hodgs.) Briscoe, Phytotaxa 202: 61 (2015)

Basionym: *Tylimanthus diversifolius* E.A.Hodgs.

Acrobolbus viridis (Mitt.) Briscoe & J.J.Engel Phytotaxa 202: 61 (2015)

Basionym: Tylimanthus viridis Mitt.

Included as a synonym of *Tylimanthus tenellus* by McCarthy (2003), *Acrobolbus viridis* is a distinct species that does not occur in Australia.

Acrochila R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 285 (1963) = **Chiastocaulon** Carl

Acrochila biserialis (Lehm. & Lindenb.) Grolle, Journal of Japanese Botany 39: 236 (1964) ≡ **Chiastocaulon biseriale** (Lehm. & Lindenb.) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs

Basionym: *Plagiochila biserialis* Lehm. & Lindenb.

Acrolejeunea (Spruce) Steph., Botanical Gazette 15(11): 286 (1890), *nom. cons.*

Basionym: *Lejeunea* subg. *Acrolejeunea* Spruce

Acrolejeunea arcuata (Nees) Grolle & Gradstein, Journal of the Hattori Botanical Laboratory 38: 322 (1974)

Basionym: *Jungermannia arcuata* Nees

Acrolejeunea arcuata subsp. **gradsteinii** M.A.M.Renner, Phytotaxa 83: 42 (2013)

Original material: Type: Queensland: Cook District: summit area of Mount Bellenden Ker, 17°16′S 145°52′E, 1580 m, 7 July 2005, *M.A.M. Renner 1912 & E.A. Brown* (holo: NSW 871961; iso: BRI, CANB, F).

Acrolejeunea aulacophora (Mont.) Steph., Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie 20: 317 (1895)

Basionym: *Phragmicoma aulacophora* Mont.

Acrolejeunea cristiloba Steph., Hedwigia 34: 56 (1895) ≡ **Caudalejeunea cristiloba** (Steph.) Gradst.

Original material: Hab. Insulae Andaman, leg. Mann. Quoad lobulum cristatum cum nulla alia commutanda. Herb. Levier.

Thiers and Gradstein (1989) cite holotypes and isotypes in herb. G. Stephani cites specimen(s) in herb. Levier as comprising the original material. Because more than one specimen comprising original material derived from herb. Levier is present in G, Thiers and Gradstein (1989)'s cited holotype is correctible to 'lectotype' under Art. 7.11.

Acrolejeunea pycnoclada (Taylor) Schiffn., Die Naturlichen Pflanzenfamilien 1(3): 128 (1893)

Basionym: *Ptychanthus pycnocladus* Taylor

Acrolejeunea securifolia (Nees) Steph. & Watts, Proceedings of the Linnean Society of New South Wales 26: 215 (1901)

Basionym: *Jungermannia securifolia* Nees

Acrolejeunea wildii Steph. ex Watts, Proceedings of the Linnean Society of New South Wales, ser. 2 26: 215 (1901) = **Acrolejeunea securifolia** subsp. **securifolia**

Acromastigum A.Evans, Bulletin of the Torrey Botanical Club 27: 103 (1900)

#Acromastigum anisostomum (Lehm. & Lindenb.) A.Evans, Annales Bryologici Supplement 3: 48 (1934)

Basionym: *Jungermannia anisostoma* Lehm. & Lindenb.

In Australia the name *Acromastigum anisostomum* has been misapplied to *Acromastigum interstisiale*. *Acromastigum anisostomum* is endemic to New Zealand (Brown and Renner 2014).

Acromastigum bancanum (Sande Lac.) A.Evans, Annales Bryologici Supplement 3: 20 (1934)

Basionym: *Mastigobryum bancanum* Sande Lac.

Acromastigum carcinum M.A.M.Renner & T.C.Wilson, Telopea 21: 46 (2018)

Original material: Australia: Queensland: Cook District, Cape York Peninsula, Jardine River National Park, Elliot Creek, 53 m, 11°22′54.7″S, 142°24′47.8″E, 8 August 2015, *M.A.M.Renner 7353 & T.C. Wilson* (holo: NSW 992696, iso: BRI, CANB, F, G).

Acromastigum cavifolium R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 257 (1963)

Acromastigum colensoanum (Mitt.) A.Evans ex Reimers, Hedwigia 73: 142 (1933)

Basionym: *Mastigobryum colensoanum* Mitt.

#Acromastigum cunninghamii (Steph.) A.Evans, Annales Bryologici Supplement 3: 106 (1934)

Basionym: *Bazzania cunninghamii* Steph.

In Australia the name *Acromastigum cunninghamii* has been misapplied to *Acromastigum prismaticale*. *Acromastigum cunninghamii* does not occur in Australia.

Acromastigum divaricatum (Nees) A.Evans ex Reimers, Hedwigia 73: 142 (1933)

Basionym: *Mastigobryum divaricatum* Nees

Acromastigum echinatiforme (De Not.) A.Evans, Annales Bryologici Supplement 3: 135 (1934)

Basionym: *Mastigobryum echinatiforme* De Not.

#Acromastigum echinatum (Gottsche) A.Evans, Annales Bryologici Supplement 3: 147 (1934)

Basionym: *Mastigobryum echinatum* Gottsche

The dubious report of this species for Tasmania was thoroughly treated by Evans (1934), *Acromastigum echinatum* is a tropical Malesian species that does not occur in Australia.

Acromastigum exiguum (Steph.) A.Evans, Annales Bryologici Supplement 3: 75 (1934)

Basionym: *Mastigobryum exiguum* Steph.

Acromastigum fumosum E.A.Br. & M.A.M.Renner, Telopea 17: 274 (2014)

Original material: Tasmania: South West: Deadmans Bay, 43°32′S, 146°29′E, 19 Jan. 1987, *A. Moscal 14127* (holo: HO 443755).

Acromastigum furcatifolium (Steph.) E.A.Br., Phytotaxa 65: 58 (2012)

Basionym: *Lepidozia furcatifolia* Steph.

Acromastigum implexum M.A.M.Renner, Telopea 21: 46 (2018)

Original material: Queensland: Cook: Bellenden Ker Range, Wooroonooran National Park, Russell River catchment, track to Choorichillum from end of Gourka Road, between NW summit and Choorichillum, 17°23′45″S, 145°48′56″E, 1460 m, 30 Mar 2012, *M.A.M. Renner 6432, V.C. Linis & E.A. Brown* (holotype: NSW 896971; isotypes: BRI, CANB, F, G)

#Acromastigum integrifolium (Austin) A.Evans, Bulletin of the Torrey Botanical Club 27: 103 (1900)

Basionym: *Mastigobryum integrifolium* Austin

Listed in McCarthy (2003) as a synonym of *Isolembidium anomalum*, the source of this synonymy is unclear. *Acromastigum integrifolium* is a Hawaiian species that is not a synonym of *Isolembidium anomalum* and does not occur in Australia.

Acromastigum interstisiale E.A.Br. & M.A.M.Renner, Telopea 17: 268 (2014)

Original material: Tasmania: South West: near start of Pedder Track, lower slopes of Sentinel Range, near road to Strathgordon, near rocky outcrops c. halfway up, 42°52′15″S, 146°12′22″E, 7 Feb. 1995, *E.A.Brown 95/04 & B.M. Wiecek* (holo: NSW 365295, iso: AK, CANB, HO)

Acromastigum mooreanum (Steph.) E.A.Hodgs., Transactions of the Royal Society of New Zealand 82: 19 (1954)

Basionym: *Bazzania mooreana* Steph.

Acromastigum prismaticale E.A.Br. & M.A.M.Renner, Telopea 17: 281 (2014)

Original material: Tasmania: Central Highlands, Mt Kate, 41°38′S, 145°58′E, 920 m, 19 Jan 1997, *A. Moscal 28912* (holo: HO 443756)

Acromastigum stenophyllum R.M.Schust., Nova Hedwigia 15(2–4): 465 (1968)

Original material: PAPUA NEW GUINEA. Mount Wilhelm. Moist, deeply shaded soil along a small, sunken, steeply cascading stream running into Lake Pinde, ca. 12,100 ft., Jun. 1967, *R.M.Schuster RMS 67-5346*.

Acromastigum tenax (Steph.) A.Evans, Annales Bryologici Supplement 3: 41 (1934)

Basionym: *Mastigobryum tenax* Steph.

Acromastigum verticale (Steph.) E.A.Hodgs., Transactions of the Royal Society of New Zealand 82: 18 (1954)

Basionym: *Mastigobryum verticale* Steph.

Acroscyphella N.Kitag. & Grolle, Acta Phytotaxonomica et Geobotanica 36: 58 (1985)

Acroscyphella iwatsukii (N.Kitag.) N.Kitag. & Grolle, Acta Phytotaxonomica et Geobotanica 36: 58 (1985)

Basionym: *Acroscyphus iwatsukii* N.Kitag.

Acroscyphella phoenicorhiza (Grolle) N.Kitag. & Grolle, Acta Phytotaxonomica et Geobotanica 34: 58 (1985)

Basionym: *Neesioscyphus phoenicorhizus* Grolle

Acroscyphus N.Kitag., Acta Phytotaxonomica et Geobotanica 35: 1 (1984), *nom. illeg.* = **Acroscyphella** N.Kitag. & Grolle

Acroscyphus iwatsukii N.Kitag., Acta Phytotaxonomica et Geobotanica 35: 3 (1984) ≡ **Acroscyphella iwatsukii** (N.Kitag.) N.Kitag. & Grolle

Adelanthus Mitt., Journal of the Proceedings of the Linnean Society, Botany 7: 243 (1864), *nom. cons.*

Adelanthus bisetulus (Steph.) Grolle, Journal of the Hattori Botanical Laboratory 35: 359 (1972) ≡ **Pseudomarsupidium piliferum** (Steph.) Herzog ex Grolle

Basionym: *Tylimanthus bisetulus* Steph.

Adelanthus falcatus (Hook.) Mitt., Journal and Proceedings of the Linnean Society, Botany 7: 243 (1864)

Basionym: *Jungermannia falcata* Hook.

Adelanthus gemmiparus (R.M.Schust.) E.A.Hodgs., Transactions of the Royal Society of New Zealand 11: 241 (1970)

Basionym: *Calyptrocolea gemmipara* R.M.Schust.

Adelanthus humilis Steph., Species Hepaticarum 6: 446 (1924) = **Pseudomarsupidium piliferum** (Steph.) Herzog ex Grolle

Original material: Hab. Nova Caledonia (Lerat legit).

Adelanthus occlusus (Hook.f. & Taylor) Carrington, Transactions of the Botanical Society Edinburgh 10: 381 (1870)

Basionym: *Jungermannia occlusa* Hook.f. & Taylor

Aitonia extensa Steph., Hepaticarum species novae III. Hedwigia 32: 17 (1893), *nom. illeg.* = **Plagiochasma rupestre** (J.R.Forst. & G.Forst.) Steph.

Orthographic. variant of *Aytonia extensa*.

Alicularia hasskarliana Nees, Synopsis Hepaticarum 1: 12 (1844) ≡ **Solenostoma hasskarliana** (Nees) R.M.Schust. ex Váňa et D.G.Long

Original material: In Java insula ad terram

Alicularia tenella Rodway, Tasmanian Bryophyta 2: 33 (1916) = **Acrobolbus concinnus** (Mitt.) Grolle

Original material: Mt. Hartz, Adamson Peak, St. Patrick's Head, Cradle Mt., etc.

Allisoniella E.A.Hodgs., Transactions of the Royal Society of New Zealand 3: 80 (1965)

Allisoniella nigra (Rodway) R.M.Schust., Nova Hedwigia 22: 137 (1972)

Basionym: *Sphenolobus niger* Rodway

Allisoniella tasmanica R.M.Schust., Nova Hedwigia 22: 145 (1972)

Allorgella Tixier, Nova Hedwigia 32: 612 (1980)

Allorgella australiensis (B.M.Thiers) Bechteler, G.E.Lee, Schäf.-Verw. & Heinrichs, Plant Systematics and Evolution 302: 199 (2015)

Basionym: *Otolejeunea australiensis* B.M.Thiers

Allorgella semperiana (Gottsche ex Steph.) Bechteler, G.E.Lee, Schäf.-Verw. & Heinrichs, Plant Systematics and Evolution 302: 199 (2015)

Basionym: *Prionolejeunea semperiana* Gottsche ex Steph.

Anastrophyllopsis (R.M.Schust.) Váňa & L.Söderstr., Phytotaxa 81: 15 (2013)

Basionym: *Anastrophyllum* sect. *Anastrophyllopsis* R.M.Schust.

Anastrophyllopsis revoluta (Steph.) Váňa & L.Söderst., Phytotaxa 81: 16 (2013)

Basionym: *Anastrophyllum revolutum* Steph.

Anastrophyllopsis subcomplicata (Lehm. & Lindenb.) Váňa & L.Söderstr., Phytotaxa 81: 16 (2013)

Basionym: *Jungermannia subcomplicata* Lehm. & Lindenb.

Anastrophyllum (Spruce) Steph., Hedwigia 32: 139 (1893)

Basionym: *Jungermannia* subg. *Anastrophyllum* Spruce

Anastrophyllum bidens (Reinw., Blume & Nees) Steph., Species Hepaticarum 2: 115 (1901) ≡ **Schizophyllopsis bidens** (Reinw., Blume et Nees) Váňa & L.Söderstr.

Basionym: *Jungermannia bidens* Reinw., Blume & Nees

Anastrophyllum piligerum (Nees) Steph., Hepaticarum species novae III. Hedwigia 32: 140 (1893)

Basionym: *Jungermannia piligera* Nees

Anastrophyllum revolutum Steph., Hedwigia 23: 139 (1893) ≡ **Anastrophyllopsis revoluta** (Steph.) Váňa & L.Söderstr.

Original material: Hab. Nova Guinea, Mt, Suckling, leg. Wm. Macgregor 1891, comm. amiciss. F. von Muller.

Anastrophyllum schismoides (Mont.) Steph., Hepaticarum species novae III. Hedwigia 32: 140 (1893) ≡ **Anastrophyllopsis subcomplicata** (Lehm. & Lindenb.) Váňa & L.Söderstr.

Basionym: *Jungermannia schismoides* Mont.

Anastrophyllum schismoides var. *crassulum* J.J.Engel, Journal of Bryology 20: 379 (1998) ≡ **Anastrophyllopsis subcomplicata** (Lehm. & Lindenb.) Váňa & L.Söderstr.

Anastrophyllum sect. *Anastrophyllopsis* R.M.Schust., Nova Hedwigia Beihefte 119: 310 (2002) ≡ **Anastrophyllopsis** (R.M.Schust.) Váňa & L.Söderstr.

Anastrophyllum tasmanicum Rodway, Tasmanian Bryophyta 2: 37 (1916) = **Chandonanthus squarrosus** (Menzies ex Hook.) Mitt.

Original material: Adamson Peak, Mt Hartz

Andrewsianthus R.M.Schust., Revue Bryologique et Lichenologique 30: 66 (1961)

Andrewsianthus bidens (Mitt. ex Steph.) R.M.Schust., Nova Hedwigia 15: 492 (1968)

Basionym: *Lophozia bidens* Mitt. ex Steph.

Andrewsianthus cuspidatus R.M.Schust., Austral Hepaticae, Part II. Beihefte zur Nova Hedwigia 119: 331 (2002), *nom. illeg.* ≡ **Andrewsianthus marionensis** (S.W.Arnell) Grolle

Basionym: *Cephalolobus squarrosus* R.M.Schust.

Andrewsianthus marionensis (S.W.Arnell) Grolle, Marion and Prince Edward Islands: 232 (1971)

Basionym: *Lophozia marionensis* S.W.Arnell

Andrewsianthus perigonialis (Hook.f. & Taylor) R.M.Schust., Nova Hedwigia Beihefte 119: 310 (2002)

Basionym: *Jungermannia perigonialis* Hook.f. & Taylor

Andrewsianthus puniceus (Nees) R.M.Schust. ex Grolle, Transactions of the British Bryological Society 4(3): 439 (1963)

Basionym: *Jungermannia punicea* Nees

Androcryphia longiseta Austin, Proceedings of the Academy of Natural Sciences of Philadelphia 21(4): 228 (1869) ≡ **Fossombronia longiseta** (Austin) Austin

Original material: On the ground among mosses. California, Bolander; Texas, Wright.

Aneura Dumort., Commentationes Botanicae: 115 (1822)

Aneura aequicellularis Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 95 (1914) ≡ **Riccardia aequicellularis** (Steph.) Hewson

Original material: Hab. Australia, New South Wales (Wentworth Falls): Watts legit no. 1117.

Aneura alba Colenso, Transactions and Proceedings of the New Zealand Institute 16: 357 (1884) ≡ **Riccardia alba** (Colenso) E.A.Br.

Original material: Hab. Growing with mosses among grasses and other small herbage, shaded banks, Scinde Island, Napier, 1883: W.C.

Aneura alcicornis (Hook.f. & Taylor) Gottsche, Synopsis Hepaticarum 4: 499 (1846) ≡ **Riccardia alcicornis** (Hook.f. & Taylor) Trevis.

Basionym: *Jungermannia alcicornis* Hook.f. & Taylor

Aneura alterniloba (Hook.f. & Taylor) Taylor & Hook.f., Synopsis Hepaticarum 4: 496 (1846) ≡ **Lobatiriccardia alterniloba** (Hook.f. & Taylor) Furuki

Basionym: *Jungermannia alterniloba* Hook.f. & Taylor

Aneura alterniloba f. *robusta* Rodway, Papers and Proceedings of the Royal Society of Tasmania 1916: 62 (1917) ≡ **Lobatiriccardia alterniloba** var. **robusta** (Rodway) Nebel

Original material: Russell Falls

Aneura alterniloba var. *gigantea* (Steph.) Hewson, Proceedings of the Linnean Society of New South Wales 94: 187 (1970) ≡ **Lobatiriccardia alterniloba** var. **gigantea** (Steph.) Nebel

Basionym: *Aneura gigantea* Steph.

Aneura alterniloba var. *robusta* (Rodway) Hewson, Proceedings of the Linnean Society of New South Wales 94: 187 (1970) ≡ **Lobatiriccardia alterniloba** var. **robusta** (Rodway) Nebel

Basionym: *Aneura alterniloba* f. *robusta* Rodway

Aneura athertonensis Hewson, Proceedings of the Linnean Society of New South Wales 94: 188 (1970) ≡ **Lobatiriccardia athertonensis** (Hewson) Furuki

Original material: Queensland: Charmillan Creek, Tully Falls Road, Atherton Tableland, on basalt rock on creek bank in disturbed rain-forest, Aug. 1964, *Hewson 422* (holo: NSW; iso: BRI).

Aneura bipinnatifida Colenso, Transactions and Proceedings of the New Zealand Institute 16: 358 (1884) ≡ **Riccardia bipinnatifida** (Colenso) Hewson

Original material: Hab - Among small herbage, mosses, etc., wet shady grounds, Scinde Island, Napier, August 1883: W.C.

Aneura cochleata (Hook.f. & Taylor) Hook.f., Handbook of the New Zealand Flora 2: 544 (1860) ≡ **Riccardia cochleata** (Hook.f. & Taylor) Kuntze

Basionym: *Riccia cochleata* Hook.f. & Taylor

Combination published on page 544, not 543 as cited in Brown & Braggins (1989).

Aneura colensoi Steph., Journal of the Linnean Society, Botany 29: 264 (1892) ≡ **Riccardia colensoi** (Steph.) W.Martin

Original material: None cited.

Aneura coriacea Steph., Species Hepaticarum 6: 23 (1917) = **Riccardia crassa** (Schwägr.) Carrington & Pearson

Original material: Hab. Australia (New South Wales) Watts legit.

Aneura crassa (Schwägr.) Nees, Synopsis Hepaticarum 500 (1867) ≡ **Riccardia crassa** (Schwägr.) Carrington & Pearson

Basionym: *Jungermannia crassa* Schwägr.

Aneura eachamensis Hewson, Proceedings of the Linnean Society of New South Wales 94: 184–185, fig.1a, fig. 2a (1970)

Original material: Queensland: Vision Falls, Lake Eacham, Atherton Tableland, on basalt rock in rain-forest, Aug. 1964, *Hewson 398* (holo: NSW; iso: BRI).

Aneura erecta Steph., Bulletin de l'Herbier Boissier 7: 758 (1899) = **Riccardia cochleata** (Hook.f. & Taylor) Kuntze

Aneura filiformis Steph., Species Hepaticarum 6: 26 (1917) = **Riccardia aequicellularis** (Steph.) Hewson

Original material: Tasmania (Weymouth legit)

Aneura gigantea Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 95 (1914) ≡ **Lobatiriccardia alterniloba** var. **gigantea** (Steph.) Nebel

Original material: Hab. Australia, N.S. Wales, (Cambewarra): Watts legit No. 920.

Aneura gracilis Steph., Bulletin de l'Herbier Boissier 7: 752 (1899) ≡ **Riccardia gracilis** (Steph.) R.M.Schust.

Original material: Hab. Tasmania, Mt Wellington (Weymouth).

Aneura graeffei Steph., Hedwigia 32: 21 (1893) ≡ **Riccardia graeffei** (Steph.) Hewson

Original material: Hab. Viti-Levu leg. Graeffe No. 1629 (ex Herb. Jack) in cortice

Aneura lichenoides Steph., Species Hepaticarum 6: 32 (1917), *nom. illeg.* = **Riccardia cochleata** (Hook.f. & Taylor) Kuntze

Original material: Hab. Tasmania, King River (Weymouth legit).

Aneura longiflora Steph., Bulletin de l'Herbier Boissier 7: 746 (1899) ≡ **Riccardia longiflora** (Steph.) Hewson

Original material: Hab. Tasmania (Weymouth).

Aneura longiflora f. *submersa* Rodway, Tasmanian Bryophyta 2: 13 (1916) = **Riccardia crassa** (Schwägr.) Carrington & Pearson

Original material: Adamson Peak.

Aneura marginata Colenso, Transactions and Proceedings of the New Zealand Institute 18: 253 (1885) ≡ **Riccardia marginata** (Colenso) Pearson

Original material: Hab. On rotten logs in low wet woods, forming close and large patches; forests near Norsewood, County of Waipawa ; 1885: W.C.

#Aneura maxima (Schiffn.) Steph., Denkschriften der Kaiserlichen Akademie der Wissenschaften, Wien. Mathematisch-naturwissenschaftliche Klasse 67: 178 (1898)

Basionym: *Riccardia maxima* Schiffn.

Bolin & Henderson (2002) recorded this species, as *Riccardia maxima*, for Queensland, and McCarthy (2003) also reported the species present in NSW but the basis for these records is not clear. Neither *Aneura maxima* nor its basionym *Riccardia maxima* were included as present in Australia by Hewson (1970a, 1970b), treatments that, though dated, remain the most authoritative accounts of Australian Aneuraceae. Australian reports of *A. maxima* do not appear to be substantiated by verified voucher specimens. We therefore regard the Australian reports of *Aneura maxima* as dubious, and accordingly exclude this species from the Australian flora.

Aneura minima (Carrington & Pearson) Steph., Species Hepaticarum 1: 229 (1899) = **Riccardia lobulata** (Colenso) E.A.Hodgs.

Basionym: *Riccardia minima* Carrington & Pearson

Aneura muscoides Colenso, Transactions and Proceedings of the New Zealand Institute 18: 251 (1885) ≡ **Riccardia marginata** (Colenso) Pearson

Original material: Hab. Sides of wet cliffs, and closely adhering to them ; River Mangatawhainui, near Norsewood, County of Waipawa ; October, 1884 : W.C.

Aneura nitida Colenso, Transactions and Proceedings of the New Zealand Institute 18: 253 (1885) ≡ **Riccardia nitida** (Colenso) E.A.Hodgs.

Original material: Hab - In low wet woods near Norsewood, County of Waipawa; 1885: W.C. On rotten logs forming large yellow patches, adhering very strongly as if gummed on; difficult to separate even when long steeped in water.

Aneura pinguis var. *lobulata-major* Gottsche, Linnaea 28: 560 (1856), *nom. inval.* = **Aneura alterniloba** (Hook.f. & Taylor) Taylor & Hook.f.

In Australia this invalid name has been misapplied to *Lobatiriccardi alterniloba*.

Aneura polymorpha Colenso, Transactions and Proceedings of the New Zealand Institute 22: 457 (1890) = **Riccardia bipinnatifida** (Colenso) Hewson

Original material: Hab. On rotten logs, low wet woods south of Dannevirke, with preceding species (A. perpusilla), but forming separate patches ; 1889 : W. C.

Aneura pusilla Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 96 (1914) ≡ **Riccardia browniae** A.Hagborg & L.Söderstr.

Original material: Hab. Australia, (Old Railway Cutting, Blackheath): Watts legit, 1051.

Aneura rodwayi Hewson, Proceedings of the Linnean Society of New South Wales 94: 188 (1970)

Original material: Tasmania: Hartz River, Mt. Hartz National Park, on clay soil near river bank, Sep. 1963, *Hewson 215* (holo: NSW)

Aneura rufescens Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 96 (1914) = **Riccardia crassa** (Schwägr.) Carrington & Pearson

Original material: Hab. Australia, New South Wales, (National Pass, Wentworth Falls): Watts legit, 1124.

Aneura rupicola Steph., Species Hepaticarum 6: 41 (1917) ≡ **Riccardia rupicola** (Steph.) Hewson

Original material: Hab. Australia, New-South Wales (Watts legit).

Aneura spathuliloba Steph., Species Hepaticarum 6: 42 (1917) = **Riccardia crassa** (Schwägr.) Carrington & Pearson

Original material: Hab. Australia, Victoria (Goebel legit).

Aneura stolonifera Steph., Hepaticae Australiae. Hedwigia 28: 129 (1889) = **Riccardia crassa** (Schwägr.) Carrington & Pearson

Original material: Hab. Australia, Illawarra (Kirton), Queensland (Walker), N. Zealand (Colenso, Helms, Kirk), Fret. Magellan. (Cunningham) , Java (leg. ?), Luzon (Semper).

Aneura tasmanica Steph., Bulletin de l'Herbier Boissier 7: 737 (1899) = **Riccardia colensoi** (Steph.) W.Martin

Original material: Hab. Australia, Hobarttown (Mt Wellington) Weymouth.

Aneura walesiana Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 97 (1914) = **Riccardia crassa** (Schwägr.) Carrington & Pearson

Original material: Hab. Australia, New South Wales, (Blackheath): Watts legit, 1023.

Aneura wattsiana Steph., Species Hepaticarum 6: 46 (1917) ≡ **Riccardia wattsiana** (Steph.) Hewson

Original material: Hab. Australia, New South Wales (Watts legit).

Anthoceros L., Species Plantarum 2: 1139 (1753)

#Anthoceros adscendens Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 4: 24 (1832)

Original material: Habitat in Nova Hollandia.

Cargill & Scott studied the type of this species in 1997 and came to the conclusion that no specimens in Australia matched the spore patterning of the type. They noted that the attribution of *A. adscendens* to 'Nova Hollandia' (=Australia) was not supported. It has also been noted that at one time Brazil was also known as 'New Holland' as was part of Maine, USA.

Anthoceros apocynon Cargill & Palsson, Telopea 24: 327 (2021)

Original material: Type: New South Wales: North West Slopes. Pilliga State Conservation Area (SCA), Dog Proof Fence Rd, in tributary of Goona Ck, edge of creekline in plain of Allocasuarina luehmannii – ironbark woodland, 13 Sep. 2020, *R.L.Palsson & K.D.Durham 398*(*3*), *p.p.* (holo: CANB 923469; iso: NSW).

Anthoceros australiae Beauverd, Species Hepaticarum 6: 571 (1924) = **Phaeoceros carolinianus** (Michx.) Prosk.

Replaced synonym: *Anthoceros crispus* Steph.

Anthoceros brotheri Steph., Hedwigia 32: 141 (1893) = **Phaeoceros carolinianus** (Michx.) Prosk.

Original material: Hab. Australia, Upper Owens River.

Anthoceros capricornii Cargill & G.A.M.Scott, Journal of the Hattori Botanical Laboratory 82: 55 (1997)

Original material: Western Australia: Beverley Springs Station, Kimberley, on soil, 1 May 1988, *G.A.M. Scott 653* (holo: MELU).

Anthoceros carnosus Steph., Hepaticae Australiae. Hedwigia 28: 130 (1889) ≡ **Megaceros gracilis** (Reichardt) Steph.

Replaced synonym: *Megaceros carnosus* (Steph.) Steph.

Anthoceros carolinianus Michx., Flora Boreali-Americana (Michaux) 2: 280. 1803. ≡ **Phaeoceros carolinianus** (Michx.) Prosk.

Original material: Hab. in humidis Carolinae inferioris.

Anthoceros communis Steph., Bulletin de l'Herbier Boissier 5: 86 (1897) = **Phaeoceros carolinianus** (Michx.) Prosk.

Original material: Tosa, Awa, Akita. Inoue.

Anthoceros crispus Steph., Species Hepaticarum 5: 990 (1916), *nom. illeg.* = **Phaeoceros carolinianus** (Michx.) Prosk.

Original material: Hab. Australia, New South Wales.

Anthoceros denticulatus Lehm., Novarum et Minus Cognitarum Stirpium Pugillus 10: 25 (1857) ≡ **Megaceros denticulatus** (Lehm.) Steph.

Original material: Habitat in Nova Zelandia.

Anthoceros evanidus Steph., Species Hepaticarum 5: 990 (1916) ≡ **Phaeoceros evanidus** (Steph.) Cargill & Fuhrer

Original material: Hab: Australia, Port Denison.

Anthoceros ferdinandi-muelleri Steph., Species Hepaticarum 5: 1007 (1916) = **Anthoceros punctatus** L.

Original material: Hab: Australia, Port Denison.

Spore morphology in the type of *Anthoceros ferdinandi-muelleri* is consistent with *A. punctatus,* we propose this new synonymy here.

Anthoceros fertilis Steph., Species Hepaticarum 5: 1006 (1916) = **Anthoceros fragilis** Steph.

Original material: Hab: Australia. Queensland.

Anthoceros flagellaris Mitt., Flora Vitiensis: 419 (1873) ≡ **Megaceros flagellaris** (Mitt.) Steph.

Original material: Samoa, on decayed bark (Powell).

Anthoceros fragilis Steph., Species Hepaticarum 5: 1006 (1916)

Original material: Hab: Queensland.

Anthoceros fuciformis Mont., Annales des Sciences Naturelles; Botanique 20: 296 (1843) ≡ **Folioceros fuciformis** (Mont.) D.C.Bhardwaj

Original material: Hab. in insula Borboniae ad terram lecta.

Anthoceros glandulosus Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 4: 26 (1832) ≡ **Folioceros glandulosus** (Lehm. & Lindenb.) D.C.Bhardwaj

Original material: Habitat in Nova Hollandia.

Anthoceros gracilis Reichardt, Verhandlungen der kaiserlich-koniglichen Zoologisch-Botanischen Gesellschaft in Wien 16: 957 (1866) ≡ **Megaceros gracilis** (Reichardt) Steph.

Original material: Neu-Holland. An feuchten Stellen um Sidney; leg. Jelinek.

Anthoceros inflatus Steph., Species Hepaticarum 5: 990 (1916) ≡ **Phaeoceros inflatus** (Steph.) Cargill & Fuhrer

Original material: Hab: Australia. New South Wales.

#Anthoceros laminifer Steph., Journal of the Linnean Society, Botany 29: 266 (1892), as '*laminiferus*'.

Original material: Type: New Zealand. Colenso 1283 (G).

This is an New Zealand species and does not occur in Australia, though listed by Windolf in 1985 in his checklists. Molecular data (Cargill et al. 2022) has shown that is genetically different from the Australian *A. punctatus* from NSW or the *A.* aff. *agrestis* from Queensland (Dawes et al. 2020).

Anthoceros longispirus Carrington & Pearson, Papers and Proceedings of the Royal Society of Tasmania 1887: 11 (1888) = **Megaceros gracilis** (Reichardt) Steph.

Original material: Type: Tasmania: Mt Wellington, St Crispins. 24 Jan. 1899, *W.A. Weymouth* (G)

Anthoceros multicapsulus Steph., Species Hepaticarum 5: 991 (1916) = **Phaeoceros carolinianus** (Michx.) Prosk.

Original material: Type: Lord Howe Island. (G).

Anthoceros palssoniae Cargill, Telopea 24: 334 (2021)

Original material: Holotype: New South Wales: North West Slopes: Pilliga State Conservation Area (SCA), Dog Proof Fence Rd, in tributary of Goona Ck, edge of creekline in plain of *Allocasuarina luehmannii* - ironbark woodland, 13 Sep. 2020, *R.L.Palsson & K.D.Durham 398*(*2*) (holo: CANB 923468; iso: NSW).

Anthoceros pellucidus Colenso, Transactions and Proceedings of the New Zealand Institute 17: 263 (1885) ≡ **Megaceros pellucidus** (Colenso) E.A.Hodgs.

Original material: Type: New Zealand. County of Waipawa, near Norsewood. W.Colenso a.1362 (WELT).

Anthoceros punctatus L., Species Plantarum 2: 1139 (1753)

Original material: Type: Habitat in Angliae, Italiae uliginosis, umbrosis (H-SOL).

Anthoceros tuberosus Taylor, New Hepaticae. London Journal of Botany 5: 412 (1846) ≡ **Phaeoceros tuberosus** (Taylor) Prosk.

Original material: Type: Australia. Swan River. Mr James Drummond 1843 (FH).

Anthoceros wellmanii Cargill, Telopea 24: 340 (2021)

Original material: New South Wales: North West Slopes: Yarrigan National Park, 12 km S Baradine, 33.1 km NW Coonabarabran on Baradine Rd, 21 Sep. 2010, *P. Wellman 588A.1* (holo: CANB 923459; iso: NSW).

Aphanolejeunea A.Evans, Bulletin of the Torrey Botanical Club 38(6): 272 (1911) = **Cololejeunea** (Spruce) Steph.

Aphanolejeunea amphibola (B.M.Thiers) Pócs & Bernecker, Acta Botanica Fennica 165: 87 (1999) ≡ **Cololejeunea amphibola** B.M.Thiers

Basionym: *Cololejeunea amphibola* B.M.Thiers

Aphanolejeunea angustiloba Horik., Journal of Science of the Hiroshima University: Series B, Division 2 (Botany) 1: 91 (1932) = **Cololejeunea sintenisii** (Steph.) Pócs

Aphanolejeunea angustissima Steph., Species Hepaticarum 5: 859 (1916) = **Cololejeunea papillosa** (K.I.Goebel) Mizut.

Aphanolejeunea bistyla Steph., Species Hepaticarum 5: 862 (1916) ≡ **Cololejeunea bistyla** Steph.

Original material: Hab. Australia. Norfolk Island.

Aphanolejeunea cyathiphylla Herzog, Svensk Botanisk Tidskrift 46: 105 (1952) = **Cololejeunea papillosa** (K.I.Goebel) Mizut.

Aphanolejeunea ephemeroides R.M.Schust., Journal of the Elisha Mitchell Scientific Society 71: 130 (1955) = **Cololejeunea sintenisii** (Steph.) Pócs

Original material: Holotype: USA, Florida, Clay Co. Gold Head Branch State Park, R.M. & O. Schuster 31405, F.

Aphanolejeunea iwatsukiana Pócs, Hikobia 11: 457 (1994) ≡ **Cololejeunea iwatsukiana** (Pócs) Pócs

Aphanolejeunea microscopica var. *borneensis* Herzog, Transactions of the British Bryological Society 1: 324 (1950) = **Cololejeunea papillosa** (K.I.Goebel) Mizut.

Aphanolejeunea sintenisii Steph., Species Hepaticarum 5: 861 (1916)

Original material: Hab. Puertorico

Aphanolejeunea teotonii Allorge & Jovet-Ast, Revue Bryologique et Lichenologique 19: 21 (1950)

Original material: S. Miguel : Parc Jose do Canto, pres Furnas, alt. 300 m., epiphylle sur Camelia. — Pico da Vara, 800-900 m., epiphylle sur Persea. — Salto do Cavalo, sur Acrostichum. Faial : Ravin Pedro Miguel, pres de Horta, corticicole. S. Jorge : Ravin San Juan, epiphylle sur Ilex Perado et sur Acrostichum squamosum. Flores : Chemin creux sous Pico de Casinha, epiphylle sur l'richomanes speciosum et sur Hymenophyllum. — Fajasinha, epiphylle sur Thamnium.

Aphanolejeunea thiersiae Pócs, Hikobia 11: 459 (1994) ≡ **Cololejeunea thiersiae** (Pócs) Pócs

Original material: Queensland: Cook District: Palmerston National Park, track to Tchupala Falls, in dense rainforest adjacent to waterfall at 750 m alt., 17°36′S, 145°47′E, 8 Jul. 1984, *B.M. Thiers & R.E. Halling 2403* (holo: EGR; iso: AD, NY).

Aphanolejeunea thiersiana Pócs, Hikobia 11: 459 (1994), *orth. var.* = **Cololejeunea thiersiae** (Pócs) Pócs

Pocs uses the epithet *thiersiae* and *thiersiana* in the protologue, the species is published as *Aphanolejeunea thiersiana* Pocs sp. nov. Article 61.3 was fulfilled when Pócs used the epithet *thiersiae* in a new combination within *Cololejeunea*.

Aphanolejeunea veillonii (Tixier) Pócs, Journal of the Hattori Botanical Laboratory 55: 311 (1984) ≡ **Cololejeunea veillonii** Tixier

Basionym: *Cololejeunea veillonii* Tixier

Aplozia acroclada Berggr., On New Zealand Hepaticae 1: 9 (1898) ≡ **Hygrolembidium acrocladum** (Berggr.) R.M.Schust.

Aplozia alpina Rodway, Papers and Proceedings of the Royal Society of Tasmania 1915: 106 (1916) = **Hepatostolonophora rotata** (Hook.f. & Taylor) J.J.Engel

Original material: Mt Wellington Plateau

Aplozia alpina f. *stipulata* Rodway, Tasmanian Bryophyta 2: 32 (1916) = **Hepatostolonophora rotata** (Hook.f. & Taylor) J.J.Engel

Aplozia lacerata Rodway, Tasmanian Bryophyta 2: 32 (1916) = **Hygrolembidium acrocladum** (Berggr.) R.M.Schust.

Aplozia rotata (Hook.f. & Taylor) Rodway, Papers and Proceedings of the Royal Society of Tasmania 1915: 106 (1916) ≡ **Hepatostolonophora rotata** (Hook.f. & Taylor) J.J.Engel

Basionym: *Jungermannia rotata* Hook.f. & Taylor

Aplozia victoriensis Bibby, Revue Bryologique et Lichenologique 23: 132 (1954) = **Solenostoma inundatum** (Hook.f. & Taylor) Mitt. ex Steph.

Original material: Victoria : On moist clay soil with Polytrichum commune, between Mt Ben Cairn and Mt. Donna Buang 1.400 m. Leg. D. Ashton, 1953.

Archeophylla R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 263 (1963)

Archeophylla schusteri (E.A.Hodgs. & Allison) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 263 (1963)

Basionym: *Temnoma schusteri* E.A.Hodgs. & Allison

Archilejeunea (Spruce) Steph., Hedwigia 27 (3/4): 113 (1888)

Basionym: *Lejeunea* subg. *Archilejeunea* Spruce

Archilejeunea australis Steph., Species Hepaticarum 4: 734 (1911) ≡ **Thysananthus australis** (Steph.) B.M.Thiers & Gradst.

Original material: Hab. Australia, New South Wales

No type specimen was designated by Stephani. Thiers and Gradstein (1989) identify a 'holotype' in G, but this citation is correctible to lectotype, because there is a duplicate of Watts 415 in NSW.

Archilejeunea calcarata Steph., Species Hepaticarum 4: 724 (1911) ≡ **Thysananthus calcaratus** (Steph.) Sukkharak & Gradst.

Original material: Hab. Insulae Vitiensis

No type specimen was designated by Stephani. Thiers and Gradstein (1989) identify a holotype in NY.

Archilejeunea mariana (Gottsche) Steph., Species Hepaticarum 4: 729 (1911) = **Cheilolejeunea mariana** (Gottsche) B.M.Thiers & Gradst.

Basionym: *Lejeunea mariana* Gottsche

Archilejeunea planiuscula (Mitt.) Steph., Species Hepaticarum 4: 731 (1911) ≡ **Spruceanthus planiusculus** (Mitt.) X.Q.Shi, R.L.Zhu & Gradst.

Basionym: *Lejeunea planiuscula* Mitt.

Archilejeunea polymorpha (Sande Lac.) B.M.Thiers & Gradst., Memoirs of the New York Botanical Garden 52: 10 (1989) ≡ **Spruceanthus polymorphus** (Sande Lac.) Verdoorn

Basionym: *Phragmicoma polymorpha* Sande Lac.

Archilejeunea robusta (Steph.) Verd., Blumea 2: 222 (1934) ≡ **Spruceanthus thozetianus** (Gottsche & F.Muell.) B.M.Thiers & Gradst.

Basionym: *Brachiolejeunea robusta* Steph.

Archilejeunea wattsiana Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 97 (1914) = **Archilejeunea polymorpha** (Sande Lac.) B.M.Thiers & Gradst.

Original material: Lord Howe Island (Transit Hill) Watts legit, 127

Asterella P.Beauv., Dictionnaire des Sciences Naturelles Edn. 1, 3: 257-258 (1805), *nom. cons.*

Asterella australis (Hook.f. & Taylor) Verd. ex G.A.M.Scott & J.A.Bradshaw, Brunonia 8(1): 15 (1986)

Basionym: *Fimbraria australis* Hook.f. & Taylor

Asterella caucasica (Steph.) H.Buch, A.Evans et Verdoorn, Annales Bryologici 10: 8 (1938) = **Asterella whiteleggeana** (Steph.) R.M.Schust.

Basionym: *Fimbraria caucasica* Steph.

Asterella conocephala (Steph.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 298 (1963)

Basionym: *Fimbraria conocephala* Steph.

Asterella dioica (Steph.) H.A.Mill., Phytologia 47: 319 (1981)

Basionym: *Fimbraria dioica* Steph.

Asterella drummondii (Taylor) R.M.Schust. ex D.G.Long, Journal of Bryology 21: 76 (1999)

Basionym: *Fimbraria drummondii* Taylor

Asterella drummondii R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 298 (1963), *nom. inval.*

#Asterella elegans (Spreng.) Trevis., Rendiconti Reale Ist. Lombardo Sci. (ser. 2) 7: 785. (1874)

Basionym: *Fimbraria elegans* Spreng.

This is a Caribbean and South American species that was recorded by Gottsche in 1856 & 1880 and also by Mueller in 1858 as occurring in Australia. This species does not occur in Australia.

Asterella longebarbata (Steph.) H.A.Mill., Phytologia 47 (4): 320 (1981)

Basionym: *Fimbraria longebarbata* Steph.

Asterella muelleri (Gottsche ex Steph.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 298 (1963)

Basionym: *Fimbraria muelleri* Gottsche ex Steph.

Asterella setisquama (Steph.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 298 (1963)

Basionym: *Fimbraria setisquama* Steph.

Asterella subplana (Steph.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 298 (1963)

Basionym: *Fimbraria subplana* Steph.

Asterella tasmanica (Steph.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 298 (1963)

Basionym: *Fimbraria tasmanica* Steph.

#Asterella tenella (L.) P.Beauv., Dictionnaire des Sciences Naturelles Edn. 1, 3: 258 (1805)

Basionym: *Marchantia tenella* L.

Asterella tenella was reported for Tasmania by McCarthy (2003), all reports from Australia are based on misidentification of other species.

Asterella tenera (Mitt.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 298 (1963)

Basionym: *Fimbraria tenera* Mitt.

Asterella tenerrima (Steph.) H.A.Mill., Phytologia 47: 320 (1981)

Basionym: *Fimbraria tenerrima* Steph.

Asterella whiteleggeana (Steph.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 298 (1963)

Basionym: *Fimbraria whiteleggeana* Steph.

Austrofossombronia R.M.Schust., Hikobia 11: 441. 1994. ≡ **Fossombronia** Raddi

Austrofossombronia australis (Mitt.) R.M.Schust., Hikobia 11: 441. 1994. ≡ **Fossombronia australis** Mitt.

Basionym: *Fossombronia australis* Mitt.

Austrolejeunea R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 244 (1963) = **Siphonolejeunea** Herzog

Austrolejeunea bidentata B.M.Thiers, The Bryologist 88: 350 (1986) ≡ **Siphonolejeunea bidentata** (B.M.Thiers) M.A.M.Renner

Austrolejeunea hamata (Grolle) Pócs, Journal of the Hattori Botanical Laboratory 99: 186 (2006) ≡ **Siphonolejeunea hamata** (Grolle) M.A.M.Renner

Basionym: *Nephelolejeunea hamata* Grolle

Austrolejeunea jarmaniana Grolle, Nova Hedwigia 55: 112 (1992) ≡ **Siphonolejeunea jarmaniana** (Grolle) M.A.M.Renner

Austrolejeunea nudipes (Hook.f. & Taylor) Grolle, Journal of the Hattori Botanical Laboratory 37: 257 (1973) ≡ **Siphonolejeunea nudipes** (Hook.f. & Taylor) Herzog

Basionym: *Jungermannia nudipes* Hook.f. & Taylor

Austrolejeunea occidentalis Pócs, Journal of the Hattori Botanical Laboratory 99: 187 (2006) ≡ **Siphonolejeunea occidentalis** (Pócs) M.A.M.Renner

Austrolejeunea olgae (R.M.Schust.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 244 (1963) ≡ **Siphonolejeunea olgae** R.M.Schust.

Basionym: *Siphonolejeunea olgae* R.M.Schust.

Austroriella Cargill & Milne, Polish Botanical Journal 58: 72 (2013)

Austroriella salta Milne & Cargill, Polish Botanical Journal 58: 72 (2013)

Original material: Western Australia: Salt lake c. 2 km S from Grigson Lookout, between Green Head and Jurien Bay, just North of Coastal Road, 29 Aug. 2009, *Jolley 175 & J. Milne* (holotype MEL; iso: CANB, PERTH).

Austroscyphus R.M.Schust., Phytologia 57(6): 409 (1985), *nom. illeg.* = **Acroscyphella** N.Kitag. & Grolle

Aytonia extensa Steph., Hedwigia 32: 17 (1893) = **Plagiochasma rupestre** (J.R.Forst. & G.Forst.) Steph.

Original material: Hab. Australia occident. leg. Helms. Camp. 10, Elder Exploring Expedition, in solo granitico humido. comm. Baron Ferd. v. Müller.

Aytonia rupestris J.R.Forst. & G.Forst., Characteres Generum Plantarum [second edition] 148, pl. 74 (1776) ≡ **Plagiochasma rupestre** (J.R.Forst. & G.Forst.) Steph.

Original material: Huic Algae nomen dedimus a Joanne Ayton, Observatore curioso, Hortulano primario Regis Magnae Britanniae in horto Botanico Kewensi.

Balantiopsis Mitt., Handbook of the New Zealand Flora 2: 751, 753 (1867)

Balantiopsis aequiloba Berggr., On New Zealand Hepaticae 1: 46 (1898) = **Balantiopsis convexiuscula** Berggr.

Balantiopsis brotheri Steph., Species Hepaticarum 4: 107 (1910)

Original material: Hab. Australia, Queensland.

Balantiopsis convexiuscula Berggr., On New Zealand Hepaticae 1: 44 (1898)

Balantiopsis decurrens Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 98 (1914) = **Balantiopsis diplophylla** (Hook.f. & Taylor) Mitt.

Original material: Hab. Australia (Wyong) Watts 985.

Synonym in McCarthy (2006).

Balantiopsis diplophylla (Hook.f. & Taylor) Mitt., Handbook of the New Zealand Flora 2: 519, 753 (1867)

Basionym: *Jungermannia diplophylla* Hook.f. & Taylor

Balantiopsis diplophylla f. *paucidentata* Rodway, Tasmanian Bryophyta 2: 78 (1916) = **Balantiopsis diplophylla** (Hook.f. & Taylor) Mitt.

Balantiopsis diplophylla var. *kirtonii* Steph., Hepaticae Australiae. Hedwigia 28: 130 (1889) ≡ **Balantiopsis diplophylla** (Hook.f. & Taylor) Mitt.

Original material: East Gippsland, Bauerlaen, 1887 -- Illawarra, G. Kirton, 1885.

Provisionally attributed to synonymy of *Balantiopsis diplophylla* pending examination of original material.

Balantiopsis hastatistipula Steph. Journal and Proceedings of the Royal Society of New South Wales 48: 98 (1914) = **Isotachis hastatistipula** (Steph.) J.J.Engel

Original material: Hab. Australia (Blackheath), Watts, 1052.

Balantiopsis kingwella Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 99 (1914) = **Balantiopsis diplophylla** (Hook.f. & Taylor) Mitt.

Original material: Hab. Australia (Kingwell, Wyong) Watts 943.

Synonym in McCarthy (2003).

Balantiopsis pusilla Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 99 (1914) = **Balantiopsis diplophylla** (Hook.f. & Taylor) Mitt.

Original material: Hab. Australia occidentalis (Herb. Watts). [I have no trace of this.— W.W.W.]

Synonym in McCarthy (2003). The comment by Watts regarding his failure to trace this material among his own records was part of the citation of original material.

Balantiopsis subkingwella Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 99 (1914) = **Balantiopsis diplophylla** (Hook.f. & Taylor) Mitt.

Original material: Hab. Australia (Kingwell, Wyong) Watts 945 971a.

Synonym in McCarthy (2003).

Balantiopsis tumida Berggr., On New Zealand Hepaticae 1: 45 (1898)

Original material: ad flumen Teremakau in montibus prov. Canterbury.

Balantiopsis wattsiana Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 100 (1914) = **Balantiopsis diplophylla** (Hook.f. & Taylor) Mitt.

Original material: Hab. Australia, N.S. Wales, (Blackheath and Wyong): Watts leg. 940a, 973, 949, etc.

Synonym in McCarthy (2003).

Bazzania Gray, A Natural Arrangement of British Plants 1: 704, 775 (1821), *nom. cons.*

Bazzania accreta (Lehm. & Lindenb.) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 414 (1877)

Basionym: *Mastigobryum accretum* Lehm. & Lindenb.

Bazzania adnexa (Lehm. & Lindenb.) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 414 (1877)

Basionym: *Jungermannia adnexa* Lehm. & Lindenb.

Bazzania amblyphylla Meagher, Nova Hedwigia 92: 487 (2011)

Original material: Queensland: Babinda Falls, 26 Jun. 1983, *W.B. Schofield 79821* (NSW 498536).

Bazzania avia Meagher, Nova Hedwigia 97: 529 (2013)

Original material: Tasmania: *Moscal 14014D* (HO 522710).

Bazzania baileyana (Steph.) Steph. ex Rodway, Tasmanian Bryophyta 2: 74 (1916) = **Bazzania adnexa** var. **adnexa**

Basionym: *Mastigobryum baileyanum* Steph.

Bazzania bilobata N.Kitag., Journal of the Hattori Botanical Laboratory 30: 257 (1967)

Bazzania caudistipula (Steph.) Inoue & H.A.Mill., Bulletin of the National Science Museum Tokyo 8: 141 (1965)

Basionym: *Mastigobryum caudistipulum* Steph.

Bazzania citharodes Meagher, Nova Hedwigia 86: 481 (2008)

Original material: Queensland: Mount Lewis, 10 Sep 1985, *G.A.M.Scott s.n.* (holo MELU: MUCV 7460; iso: CANB, F).

Bazzania corbierei (Steph.) Meagher, Nova Hedwigia 86: 483 (2008)

Basionym: *Mastigobryum corbierei* Steph.

Bazzania crenata (Trevis.) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 415 (1877)

Basionym: *Pleuroschisma crenata* Trevis.

Bazzania cunninghamii Steph., Hedwigia 32: 205 (1893) ≡ **Acromastigum cunninghamii** (Steph.) A.Evans

Original material: Hab. Nova Guinea sine loco natali. com. Kern.

Bazzania densa (Sande Lac.) Schiffn., Conspectus Hepaticarum Archipelagi Indici: 150 (1898)

Basionym: *Mastigobryum densum* Sande Lac.

#Bazzania echinata (Gottsche) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 414 (1877) = **Acromastigum echinatum** (Gottsche) A.Evans

Basionym: *Mastigobryum echinatum* Gottsche

Gottsche (Syn. Hepat. 1845: 218) gave 'van Diemen's Land? Dr. Spence 1824 in herb. Greville' in error; it is a tropical species.

Bazzania erosa (Reinw., Blume & Nees) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 414 (1877)

Basionym: *Jungermannia erosa* Reinw., Blume & Nees

Bazzania fallax (Sande Lac.) Schiffn., Conspectus Hepaticarum Archipelagi Indici: 158 (1898)

Basionym: *Mastigobryum fallax* Sande Lac.

Bazzania fasciculata (Steph.) Meagher, Australasian Bryological Newsletter 46: 6 (2002)

Basionym: *Mastigobryum fasciculatum* Steph.

Bazzania filiformis Steph., Hedwigia 28: 131 (1889)

Bazzania franciana (Steph.) N.Kitag., Journal of the Hattori Botanical Laboratory 36: 446 (1973)

Basionym: *Mastigobryum francianum* Steph.

Bazzania fuhreri Meagher, Nova Hedwigia 92: 488 (2011)

Original material: Queensland: Tysons Track near Darkwood, 28 Apr. 1989, *E.A. Brown 89/113a* (holo: NSW 436405; iso MEL).

Bazzania gamscottii Meagher, Nova Hedwigia 92: 492 (2011)

Original material: Queensland: Little Cooper Creek, Thornton Peak, 11 Jun 1998, *M.D. Godwin C4298* (holo: BRI AQ717077; iso: MEL).

Bazzania gedeana (Steph.) Meijer, Species Hepaticarum 6: 463 (1924)

Basionym: *Mastigobryum gedeanum* Steph.

Bazzania hochstetteri (Reichardt) E.A.Hodgs., Transactions of the Royal Society of New Zealand 82: 11 (1954)

Basionym: *Mastigobryum hochstetteri* Reichardt

Bazzania intermedia (Gottsche & Lindenb.) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 414 (1877)

Basionym: *Mastigobryum intermedium* Gottsche & Lindenb.

Bazzania involuta (Mont.) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 414 (1877)

Basionym: *Herpetium involutum* Mont.

Bazzania javanica (Sande Lac.) Schiffn., Conspectus Hepaticarum Archipelagi Indici: 163 (1898)

Basionym: *Mastigobryum javanicum* Sande Lac.

Bazzania loricata (Reinw., Blume & Nees) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 414 (1877)

Basionym: *Jungermannia loricata* Reinw., Blume & Nees

Bazzania mittenii (Steph.) Steph., Hedwigia 28: 132 (1889)

Basionym: *Mastigobryum mittenii* Steph.

Bazzania monilinervis (Lehm. & Lindenb.) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 414 (1877)

Basionym: *Jungermannia monilinervis* Lehm. & Lindenb.

Bazzania mooreana Steph., Hepaticarum species novae V. Hedwigia 33: 1 (1894) ≡ **Acromastigum mooreanum** (Steph.) E.A.Hodgs.

Original material: Hab. Tasmania occid. Spreut River, leg. J. B. Moore. Comm. Baron Ferd. v. Muller. Melbourne.

#Bazzania morokensis (Steph.) Grolle, Journal of the Hattori Botanical Laboratory 31: 1 (1968)

Basionym: *Mastigobryum morokense* Steph.

Bazzania morokensis does not occur in Australia.

Bazzania nitida (F.Weber) Grolle, Revue Bryologique et Lichenologique 29: 210 (1960)

Basionym: *Jungermannia nitida* F.Weber

Bazzania nova J.J.Engel & G.L.Merr., The Bryologist 97: 313 (1994) = **Bazzania mittenii** (Steph.) Steph.

Bazzania novae-hollandiae (Nees ex Hook.f. & Taylor) Carrington & Pearson, Proceedings of the Linnean Society of New South Wales, ser. 2 2(4): 1047 (1888) = **Bazzania adnexa** var. **adnexa**

Basionym: *Jungermannia novae-hollandiae* Nees ex Hook.f. & Taylor

Bazzania novae-zelandiae (Mitt.) Besch. & C.Massal., Mission Scientifique du Cap Horn 5, Botanique 5: 233 (1889)

Basionym: *Mastigobryum novae-zelandiae* Mitt.

Bazzania parisii (Steph.) N.Kitag., Journal of the Hattori Botanical Laboratory 47: 135 (1980)

Basionym: *Mastigobryum parisii* Steph.

Bazzania sauropoda Meagher, Austrobaileya 7(1): 129 (2005)

Bazzania serpentina (Nees) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 414 (1877)

Basionym: *Jungermannia serpentina* Nees

Bazzania subtilis (Sande Lac.) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 414 (1877)

Basionym: *Mastigobryum subtile* Sande Lac.

Bazzania tessellata Meagher, Nova Hedwigia 92: 492 (2011)

Original material: Queensland: Thornton Peak, 7 Oct 1986, *P. Phillips s.n.* (holo: MELU 506; iso: MEL).

Bazzania tridens (Reinw., Blume & Nees) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 415 (1877)

Basionym: *Jungermannia tridens* Reinw., Blume & Nees

The absence of *Bazzania tridens* from the synopsis of Meagher (2019) is interpreted here as an implicit rejection of this species from Australia, consistent with the rejection in McCarthy (2003).

Bazzania uncigera (Reinw., Blume & Nees) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 415 (1877)

Basionym: *Jungermannia uncigera* Reinw., Blume & Nees

Bazzania vittata (Gottsche) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 415 (1877)

Basionym: *Mastigobryum vittatum* Gottsche

Bazzania wattsiana (Steph.) Meagher, Australasian Bryological Newsletter 50: 8 (2005)

Basionym: *Mastigobryum wattsianum* Steph.

Bazzania wooroonooran Meagher, Nova Hedwigia 100: 549 (2015)

Bazzania zonulata Meagher, Nova Hedwigia 86: 491 (2008)

Blasia javanica Sande Lac., Synopsis Hepaticarum Javanicarum 94 (1856[1857]) ≡ **Notothylas javanica** (Sande Lac.) Gottsche

Blepharidophyllum Angstr., Ofversigt Kongl. Vetenskaps-Akademiens Forhandlingar 30(5): 151 (1873)

Blepharidophyllum subg. *Clandarium* Grolle, Journal of the Hattori Botanical Laboratory 28: 65 (1965) ≡ **Clandarium** (Grolle) R.M.Schust.

Blepharidophyllum vertebrale (Gottsche) Angstr. ex C.Massal., Nuovo Giornale Botanico Italiano 17: 208 (1885)

Basionym: *Scapania vertebralis* Gottsche

Blepharidophyllum xiphophyllum Grolle, Journal of the Hattori Botanical Laboratory 28: 65 (1965) ≡ **Clandarium xiphophyllum** (Grolle) R.M.Schust.

Blepharostoma corrugatum Steph., Hepaticarum species novae IV. Hedwigia 32: 315 (1893) ≡ **Trichotemnoma corrugatum** (Steph.) R.M.Schust.

Original material: Hab. N. Zelandia. Stewart Island, leg. Kirk. No 266.

Blepharostoma palmatum Lindb. ex Pearson, Journal of Botany, British and Foreign 25: 193 (1887) ≡ **Temnoma palmatum** (Lindb. ex Pearson) R.M.Schust.

Original material: Habitat. — Otago, New Zealand, inter Hypnum rutabulm, 1863, n. 13 ; Hector (Herb. Lindb.). Cambewarra, near Moss Vale, New South Wales; collected by Mr. C. Harris ; communicated by Mr. T. Whitelegge, Sept. 1885.

Blyttia spinosa Gottsche, Linnaea 28: 560 (1856) = **Pallavicinia xiphoides** (Hook.f. & Taylor) Trevis.

Original material: Habitat in alpibus Australibus

Brachiolejeunea brotheri Steph. ex Bonner, Index Hepaticarum 3: 447 (1963), *nom. inval.* = **Spruceanthus thozetianus** (Gottsche & F.Muell.) B.M.Thiers & Gradst.

Brachiolejeunea plagiochiloides Steph. & Spruce, Hedwigia 28: 167 (1889), *nom. inval.* = **Spruceanthus thozetianus** (Gottsche & F.Muell.) B.M.Thiers & Gradst.

Original material: Hab. Australia. N. S. Wales. Shoalhaven leg. W. Bauerlen. Sept. 1884. No. 636. Herb. Mus. phyt. Melbourne. com. Dr. Karl. Muller. Halle.

Genus invalid when species was published.

Brachiolejeunea plagiochiloides Steph. & Spruce ex Steph., Species Hepaticarum 5: 141 (1912) = **Spruceanthus thozetianus** (Gottsche & F.Muell.) B.M.Thiers & Gradst.

Original material: Hab. Australia. New South Wales.

Stephani provides reference to the previous invalid name, and a revised description.

Brachiolejeunea robusta Steph., Species Hepaticarum 5: 141 (1912) = **Spruceanthus thozetianus** (Gottsche & F.Muell.) B.M.Thiers & Gradst.

Original material: Hab. Australia. New South Wales.

Brachiolejeunea wattsiana Steph. ex Verd., Blumea 1: 222 (1934), *nom. inval.* = **Mastigolejeunea ligulata** (Lehm. & Lindenb.) Schiffn.

Brevianthus J.J.Engel & R.M.Schust., Phytologia 47(4): 317 (1981)

Brevianthus flavus (Grolle) J.J.Engel & R.M.Schust., Phytologia 47(4): 318 (1981)

Basionym: *Jackiella flava* Grolle

Bryopteris fruticosa Lindenb. & Gottsche, Synopsis Hepaticarum 5: 737 (1847) ≡ **Dendrolejeunea fruticosa** (Lindenb. & Gottsche) Lacout.

Original material: Habitat in St. Domingo (Hb. Hook. n. 39)

Calobryum gibbsiae Steph., Species Hepaticarum 6: 76 (1917) ≡ **Haplomitrium gibbsiae** (Steph.) R.M.Schust.

Original material: Hab. Nova Zelandia (Gibbs legit)

Calypogeia Raddi, Jungermanniogr. Etrusca: 31 (1818), *nom. cons.*

Calypogeia arguta Nees & Mont., Naturgeschichte der Europäischen Lebermoose 3: 24. 1838.

Calypogeia sphagnicola (Arnell & J.Perss.) Warnst. & Loeske, Verhandlungen des Botanischen Vereins der Provinz Brandenburg und die angrenzenden Lander 47: 320 (1906)

Basionym: *Kantius sphagnicola* Arnell & J.Perss.

Calypogeia tasmanica Rodway, Papers and Proceedings of the Royal Society of Tasmania 1915: 107 (1916) = **Calypogeia sphagnicola** (Arnell & J.Perss.) Warnst. & Loeske

Original material: Adamson Peak.

McCarthy (2006) lists this as a synonym of *Calypogeia sphagnicola* and as an accepted species alongside *C. sphagnicola*, both recorded from Tasmania. Söderström et al. (2016) have *C. tasmanica* as a synonym of *Calypogeia sphagnicola*, citing McCarthy (2006) as the source reference. Schuster (1969), cited in Engel and Glenny (2008), stated that he could find no real differences between the plant from Tasmania and *C. sphagnicola*. We regard *C. tasmanica* as a synonym of *C. sphagnicola* following Schuster, but recommend assessment of types to confirm this synonymy.

Calyptrocolea R.M.Schust., Revue Bryologique et Lichenologique 34: 685 (1967) = **Adelanthus** Mitt.

Calyptrocolea falcata (Hook.) R.M.Schust., Revue Bryologique et Lichenologique 34: 689 (1967) ≡ **Adelanthus falcatus** (Hook.) Mitt.

Basionym: *Jungermannia falcata* Hook.

Calyptrocolea gemmipara R.M.Schust., Revue Bryologique et Lichenologique 34: 695 (1967) ≡ **Adelanthus gemmiparus** (R.M.Schust.) E.A.Hodgs.

Castanoclobos J.J.Engel & Glenny, Novon 17: 424 (2007)

Castanoclobos julaceus (Hatcher ex J.J.Engel) J.J.Engel & Glenny, Novon 17: 425 (2007)

Basionym: *Leiomitra julacea* Hatcher ex J.J.Engel

Caudalejeunea Steph. ex Schiffn., Die Natürlichen Pflanzenfamilien, Teil. I, Abt. 3: 128 (1893)

Caudalejeunea cristiloba (Steph.) Gradst., Acta Botanica Neerlandica 21: 343 (1974)

Basionym: *Acrolejeunea cristiloba* Steph.

Caudalejeunea lessonii Steph., Hedwigia 34: 233 (1895)

Original material: Hab. Nova Guinea, leg. Lesson. Herb. Bischerelle

Caudalejeunea recurvistipula (Gottsche) Schiffn., Die Naturlichen Pflanzenfamilien 1(3): 129 (1893)

Basionym: *Lejeunea recurvistipula* Gottsche

Caudalejeunea reniloba (Gottsche) Steph., Species Hepaticarum 5: 16 (1912) = **Caudalejeunea recurvistipula** (Gottsche) Schiffn.

Basionym: *Phragmicoma reniloba* Gottsche

Cephalolobus squarrosus R.M.Schust., Revue Bryologique et Lichenologique 34: 256 (1967) = **Andrewsianthus marionensis** (S.W.Arnell) Grolle

Cephalomitrion R.M.Schust., Nova Hedwigia 61: 350 (1995)

Cephalomitrion aterrimum (Steph.) R.M.Schust., Nova Hedwigia 61: 554 (1995)

Basionym: *Cephalozia aterrima* Steph.

Cephalozia (Dumort.) Dumort., Recueil Observ. Jungerm. 18 (1835)

Basionym: *Jungermannia* sect. *Cephalozia* Dumort.

Cephalozia arenaria Steph., Species Hepaticarum 3: 334 (1908) ≡ **Cephaloziella arenaria** (Steph.) R.M.Schust.

Original material: Hab. Australia. Richmond River (Watts).

Cephalozia aterrima Steph., Bulletin de l'Herbier Boissier Series 2 8: 501 (1908) ≡ **Cephalomitrion aterrimum** (Steph.) R.M.Schust.

Original material: Hab. Tasmania in cacumine Montis Wellington (Weymouth).

Cephalozia hirta Steph., Bulletin de l'Herbier Boissier Series 2 8: 561 (1908) ≡ **Cephaloziella hirta** (Steph.) R.M.Schust.

Original material: Hab. Australia, New South Wales. (Forsyth, Goebel) Queensland (Wild) Tasmania (Weymouth).

Cephalozia leitgebiana Carrington & Pearson, Papers and Proceedings of the Royal Society of Tasmania 1887: 3 (1888) ≡ **Zoopsis leitgebiana** (Carrington & Pearson) Bastow

Original material: Habitat. — New Zealand, Dr. Buchanan (Herb. Leitgeb); 304, St. Crispin's Well, Mount Wellington, Hobart, Tasmania. R.A. Bastow. Balls-head Bay, Sydney, N.S.W., T. Whitelegge, June, 1885, male and female cum per.

Cephalozia levieri Steph., Bulletin de l'Herbier Boissier, sér. 2, 8(7): 503 (1908) ≡ **Cephaloziella squarrosula** Steph.

Original material: Hab. Tasmania in Mt Wellington (Weymouth).

Cephalozia macgregorii (Steph.) Váňa, Phytotaxa 112: 12 (2013)

Basionym: *Hygrobiella macgregorii* Steph.

Cephalozia setulosa (Leitg.) Spruce, On Cephalozia 27. 1882. ≡ **Zoopsis setulosa** Leitg.

Basionym: *Zoopsis setulosa* Leitg.

Cephalozia squarrosula Trevis., Memorie del Reale Istituto Lombardo di Scienze e Lettere, Serie 3, Classe di Scienze Matematiche e Naturali 4: 417 (1877) ≡ **Cephaloziella squarrosula** Steph.

Replaced synonym: Jungermannia squarrosula Taylor

Cephalozia subg. *Cephaloziella* Spruce, On Cephalozia (a genus of Hepaticae): its subgenera and some allied genera: 62 (1882)

Cephaloziella (Spruce) Schiffn., Die Naturlichen Pflanzenfamilien 1(3): 98 (1893), *nom. cons.*

Basionym: *Cephalozia* subg. *Cephaloziella* Spruce

Cephaloziella arctica subsp. *subantarctica* R.M.Schust., Nova Hedwigia 22: 197 (1972)

Original material: New Zealand, South Island, Otago Province, Old Man Range, near summit of the 'Old Man', 5300 ft, R.M.Schuster 67-515a.

Cephaloziella arenaria (Steph.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 280 (1963)

Basionym: *Cephalozia arenaria* Steph.

#Cephaloziella dentata (Raddi) Lindb., Journal of the Linnean Society, Botany 13(67): 192 (1873)

Basionym: *Jungermannia dentata* Raddi

Jungermannia dentata Raddi, the basionym of *Cephaloziella dentata*, was included as a synonym of *Cephaloziella hirta* (Steph.) R.M.Schust. in McCarthy (2003). The reason for this synonymy listing has not been established by us. *Cephaloziella dentata* is accepted as distinct from *Cephaloziella hirta* in the world checklist (Söderström et al. 2016). *Cephaloziella dentata* is based on specimens from Italy, and *Cephaloziella hirta* is based on specimens Australia. We have located no specimens supporting the occurrence of *Cephaloziella dentata* in Australia, and accordingly exclude this species, and its basionym, from the Australian flora following the global consensus on species circumscription, and current knowledge of distributions.

Cephaloziella exiliflora (Taylor) Douin, Memoires de la Societe Botanique de France 29: 72 (1920)

Basionym: *Jungermannia exiliflora* Taylor

Cephaloziella hirta (Steph.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 280 (1963)

Basionym: *Cephalozia hirta* Steph.

Cephaloziella kiaeri (Austin) Douin, Mémoires de la Société Botanique de France 29: 69 (1920) ≡ **Cylindrocolea kiaeri** (Austin) Váňa

Basionym: *Jungermannia kiaeri* Austin

Cephaloziella levieri (Steph.) Schiffn. ex Douin, Memoires de la Societe Botanique de France 29: 80 (1920)

Basionym: *Cephalozia levieri* Steph.

Cephaloziella muelleriana R.M.Schust., Nova Hedwigia 63: 24 (1996)

Original material: New Zealand, North Is. along Whirinaki River, Schuster 95-371.

Cephaloziella nigra (Rodway) Grolle, Journal of Japanese Botany 41: 225 (1966) ≡ **Allisoniella nigra** (Rodway) R.M.Schust.

Basionym: *Sphenolobus niger* Rodway

Cephaloziella pulcherrima R.M.Schust., Nova Hedwigia 22: 203 (1972)

Original material: New Zealand, Fiordland National Park, track from Lake MacKenzie to Harris Saddle, ca 3800 ft, Schuster 67-369.

Cephaloziella pulcherrima subsp. **sphagnicola** R.M.Schust., Nova Hedwigia 22: 205 (1972)

Original material: Tasmania, Lake St Clair National Park, Mt Rufus, NW of Derwent Bridge, 4500-4750 ft, Schuster 50541.

Cephaloziella pulcherrima subsp. *pulcherrima* was accepted as occurring in Australia by McCarthy (2003) based on the Tasmanian liverwort and hornwort flora compilation of Moscal & Kirkpatrick (2005, 2007). Engel & Glenny (2008) accept *C. pulcherrima* subsp. *sphagnicola* as occurring in Tasmania and state that *C. pulcherrima* subsp. *pulcherrima* is endemic to

New Zealand. Though Engel and Glenny (2008) do not directly address the basis for the Tasmanian reports of Moscal & Kirkpatrick (2005, 2007), we accept their explicit restriction of *C. pulcherrima* subsp. *pulcherrima* to New Zealand as an implicit rejection of Tasmanian occurrences, and accordingly exclude that subspecies from Australia. All Australian records are referable to *C. pulcherrima* subsp. *sphagnicola*.

Cephaloziella squarrosula Steph., Hepaticarum species novae IV. Hedwigia 32: 318 (1893)

Basionym: *Cephalozia squarrosula* Trevis.

Cephaloziella varians (Gottsche) Steph., Wissenschaftlichen Ergebnisse Schweidischen Sudpolar-Expedition 4(1): 4 (1905)

Basionym: *Jungermannia varians* Gottsche

Cephaloziella varians var. **subantarctica** (R.M.Schust.) R.M.Schust. ex J.J.Engel, Novon 17: 314 (2007)

Basionym: *Cephaloziella arctica* subsp. *subantarctica* R.M.Schust.

#Cephaloziella verrucosa Steph., Hedwigia 32: 318 (1893)

Original material: Hab. Fretum magellanicum, com. clar. Husnot.

Cephaloziella verrucosa was listed, with doubt, as a synonym of *C. exiliflora* by McCarthy (2003), in line with the synonymy proposed by Fulford (1976). However, the status of *C. verrucosa* is unresolved, it was listed as a synonym of *C. dusenii* by Engel (1978), and despite these proposed synonymies, is currently accepted globally (Söderström et al. 2016) and by workers in South America, for example Larrain et al.'s online checklist of Chilean liverworts (https://bryophyteportal.org/portal/checklists/checklist.php?clid=56&pid=9; accessed 23 July 2023). We follow these most recent opinions regarding the status of this species, and as there is no firm documentary evidence for its occurrence in Australia, exclude it from the Australian flora here.

Ceramanus E.D.Cooper, Phytotaxa 97: 53 (2013)

Ceramanus centipes (Taylor ex Gotsche, Lindenb. & Nees) E.D.Cooper, Phytotaxa 97: 53 (2013)

Basionym: *Lepidozia centipes* Taylor ex Gottsche, Lindenb. & Nees

Ceramanus clatritexta (Steph.) E.D.Cooper, Phytotaxa 97: 54 (2013)

Basionym: *Lepidozia clatritexta* Steph.

Ceramanus elegans (Colenso) E.D.Cooper, Phytotaxa 97: 54 (2013)

Basionym: *Lepidozia elegans* Colenso

Ceramanus grossiseta (Steph.) E.D.Cooper, Phytotaxa 97: 54 (2013)

Basionym: *Lepidozia grossiseta* Steph.

Ceratolejeunea (Spruce) Jack & Steph., Hedwigia 31 (1): 16 (1892)

Basionym: *Lejeunea* subg. *Ceratolejeunea* Spruce

Ceratolejeunea belangeriana (Gottsche) Steph., Species Hepaticarum 5: 396 (1913)

Basionym: *Lejeunea belangeriana* Gottsche

Ceratolejeunea oceanica (Mitt.) Steph., Species Hepaticarum 5: 428 (1913) = **Ceratolejeunea belangeriana** (Gottsche) Steph.

Basionym: *Lejeunea oceanica* Mitt.

Cesia erosa Carrington & Pearson, Papers and Proceedings of the Royal Society of Tasmania 1887: 8 (1888) ≡ **Nothogymnomitrion erosum** (Carrington & Pearson) R.M.Schust.

Original material: Hab. top of Mount Wellington, Tasmania, January 1st, 1886. 284.

Cesia stygia var. *denticulata* Berggr., On New Zealand Hepaticae 1: 4 (1898) = **Nothogymnomitrion erosum** (Carrington & Pearson) R.M.Schust.

Chaetophyllopsis R.M.Schust., Journal of the Hattori Botanical Laboratory 23: 69 (1960)

Chaetophyllopsis whiteleggei (Carrington & Pearson) R.M.Schust., Records of the Dominion Museum 7: 255, 278 (1972)

Basionym: *Jungermannia whiteleggei* Carrington & Pearson

Chandonanthus Mitt., Handbook of the New Zealand Flora 2: 750, 753 (1867)

Chandonanthus squarrosus (Menzies ex Hook.) Mitt., Handbook of the New Zealand Flora 2: 753 (1867)

Basionym: *Jungermannia squarrosa* Menzies ex Hook.

Cheilolejeunea (Spruce) Steph., Hedwigia 29(3): 135 (1890)

Basionym: *Lejeunea* subg. *Cheilolejeunea* Spruce

Cheilolejeunea albovirens (Hook.f. & Taylor) E.A.Hodgs., Records of the Dominion Museum 4: 127 (1962)

Basionym: *Jungermannia albovirens* Hook.f. & Taylor

Cheilolejeunea campbelliensis (Steph.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 245 (1963)

Basionym: *Strepsilejeunea campbelliensis* Steph.

Cheilolejeunea celata M.A.M.Renner & Glenny, Journal of Bryology 25(3): 169 (2003) = **Cheilolejeunea campbelliensis** (Steph.) R.M.Schust.

Cheilolejeunea ceylanica (Gottsche) R.M.Schust. & Kachroo, Journal of the Linnean Society, Botany 56: 509 (1961)

Basionym: *Lejeunea ceylanica* Gottsche

Cheilolejeunea clavata Mizut., Journal of the Hattori Botanical Laboratory 46: 361 (1979)

Original material: Thailand: Payap, Mt. Inthanon, 1500 m, on bark of tree, *A. Touw 9585* (holo: L).

Cheilolejeunea comitans (Hook.f. & Taylor) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 245 (1963)

Basionym: *Lejeunea comitans* Hook.f. & Taylor

Cheilolejeunea decursiva (Sande Lac.) R.M.Schust., Beihefte zur Nova Hedwigia 9: 112 (1963)

Basionym: *Lejeunea decursiva* Sande Lac.

Cheilolejeunea falsinervis (Sande Lac.) Kachroo & R.M.Schust., Journal of the Linnean Society, Botany 56: 509 (1961)

Basionym: *Lejeunea falsinervis* Sande Lac.

Cheilolejeunea gardneri (Mitt.) Mizut., Journal of the Hattori Botanical Laboratory 26: 181 (1963)

Basionym: *Lejeunea gardneri* Mitt.

Cheilolejeunea gunniana (Mitt.) Steph., Species Hepaticarum 5: 675 (1914) = **Lejeunea drummondii** Taylor

Basionym: *Lejeunea gunniana* Mitt.

Cheilolejeunea hallingii B.M.Thiers, Brittonia 44(2): 160 (1992)

Original material: Queensland: North coast region: Cape Tribulation National Park, Noah Head section, 30 km N of the Daintree River ferry, lowland rainforest, 0.5 km inland from coast, 10°7′S, 14°27′E, *Thiers & Halling 2675* (holo: AD; iso: NY).

Cheilolejeunea hobartiensis Pearson, Revue Bryologique 49: 11 (1922) = **Cheilolejeunea mimosa** (Hook.f. & Taylor) R.M.Schust.

Original material: Hab. — On Native Oak, New Town Rivulet, near Hobart ; on rocks New Town Rivulet, 9-11-1899. Williamsford,

1-1-1900, on rocks and Native Laurel 1000 ft, 1-1-1900. Tasmania. W. A. Weymouth.

Cheilolejeunea imbricata (Nees) S.Hatt., Miscellanea Bryologica et Lichenoligica 1: 1 (1957) = **Cheilolejeunea trapezia** (Nees) Kachroo & R.M.Schust.

Basionym: *Jungermannia thymifolia* α *imbricata* Nees

Thiers (1997) listed *Cheilolejeunea trapezia* as a new synonym of *C. imbricata*, however the oldest available name at species rank is *Jungermannia trapezia*, which therefore has priority.

Cheilolejeunea implexicaulis (Hook.f. & Taylor) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 245 (1963) = **Cheilolejeunea mimosa** (Hook.f. & Taylor) R.M.Schust.

Basionym: *Jungermannia implexicaulis* Hook.f. & Taylor

Cheilolejeunea incisa (Gottsche, Lindenb. & Nees) R.M.Schust. & Kachroo, Journal of the Linnean Society, Botany 56: 509 (1961)

Basionym: *Lejeunea incisa* Gottsche, Lindenb. & Nees

Cheilolejeunea incisa var. **teretiflora** B.M.Thiers, Journal of the Hattori Botanical Laboratory 82: 321 (1997)

Original material: Queensland: Tully Falls National Park, 24 km S of Ravenshoe, mesophyll vine forest, 7 Jul. 1984, *Thiers 2299* (holo: AD; iso: NY).

Cheilolejeunea intertexta (Lindenb.) Steph., Hedwigia 29: 85 (1890)

Basionym: *Lejeunea intertexta* Lindenb.

Cheilolejeunea longidens (Steph.) R.M.Schust. & Kachroo, Journal of the Linnean Society, Botany 56: 509 (1961)

Basionym: *Pycnolejeunea longidens* Steph.

Cheilolejeunea longiloba (Steph. ex G.Hoffm.) Kachroo & R.M.Schust., Journal of the Linnean Society, Botany 56: 509 (1961)

Basionym: *Pycnolejeunea longiloba* Steph. ex G.Hoffm.

Cheilolejeunea mariana (Gottsche) B.M.Thiers & Gradst., Memoirs of the New York Botanical Garden 52: 75 (1989)

Basionym: *Lejeunea mariana* Gottsche

Cheilolejeunea meyeniana (Gottsche, Lindenb. & Nees) R.M.Schust. & Kachroo, Journal of the Linnean Society, Botany 56: 509 (1961)

Basionym: *Lejeunea meyeniana* Gottsche, Lindenb. & Nees

Cheilolejeunea mimosa (Hook.f. & Taylor) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 245 (1963)

Basionym: *Jungermannia mimosa* Hook.f. & Taylor

Cheilolejeunea muscicola Steph., Hedwigia 34: 243 (1895) = **Lejeunea flava** (Schwägr.) Nees

Original material: Hab. Nova Zelandia (Kirk 535).

Listed in synonymy of *Lejeunea sinclairii* Spruce by Grolle (1982).

Cheilolejeunea norrisii (Grolle) M.A.M.Renner, The Bryologist 115: 550 (2012)

Basionym: *Lejeunea norrisii* Grolle

Cheilolejeunea occlusa (Herzog) T. Kodama & N. Kitag., Bulletin of the Osaka Museum of Natural History 28: 40 (1974)

Basionym: *Strepsilejeunea occlusa* Herzog

Cheilolejeunea oscilla M.A.M.Renner, The Bryologist 115: 551 (2012)

Original material: Queensland: North Kennedy: vicinity of Cardwell, Five Miles Creek Road, 18°18′9″S, 146°01′9″E, 80 m, 1 Jul. 2005, *M.A.M. Renner 1646 & E.A. Brown* (holo: NSW 866201; iso: BRI, CANB).

Cheilolejeunea parvidens B.M.Thiers, Journal of the Hattori Botanical Laboratory 82: 323 (1997)

Original material: Queensland. Mt. Lewis, Mareeba, 10 Sep. 1985, *Scott s.n.* (MUCV 7380).

Cheilolejeunea pterota Herzog, Mitteilungen aus dem Institut für Allgemeine Botanik in Hamburg 7: 210 (1931) ≡ **Lejeunea herzogii** Mizut.

Cheilolejeunea richmondiana Watts, Proceedings of the Linnean Society of New South Wales 26: 215 (1901), *nom. inval.* = **Lejeunea cuspidistipula** (Steph.) Steph.

Cheilolejeunea serpentina (Mitt.) Mizut., Journal of the Hattori Botanical Laboratory 26: 171 (1963)

Basionym: *Lejeunea serpentina* Mitt.

Cheilolejeunea spathulata Mizut., Journal of the Hattori Botanical Laboratory 34: 229 (1970) = **Cheilolejeunea decursiva** (Sande Lac.) R.M.Schust.

Original material: Malaysia, Sabah, Mt Kinabalu, 2000-2146 m, on boulder, M. Mizutani 2442 (holotype NICH; isotype: JE).

Cheilolejeunea streimannii Pócs & Ninh, Acta Botanica Hungarica 47: 162 (2005)

Original material: Vietnam, Vu Quang Nature Reserve. Primary hill forest in Man Đŕi River valley, 2 km S of Tram Sao-La Research Station, at 200 m alt. Epiphyllous on *Caryota* palm leaves, *T. Pócs 02108/H* (holo: EGR; iso: FM, G, GOET, HIRO, HNU, MO, NICH, SINU).

Cheilolejeunea tisserantii Vanden Berghen & Jovet-Ast, Revue Bryologique et Lichenologique 20: 105 (1951) = **Cheilolejeunea decursiva** (Sande Lac.) R.M.Schust.

Original material: Type: Central Africa. Boukoko. Oubangui. sur bois pourri. R. P. Tisserant 11090 p.p. (holotypc: PC; isotype: Herb. Vanden Berghen, JE).

Cheilolejeunea trapezia (Nees) Kachroo & R.M.Schust., Journal of the Linnean Society, Botany 56: 509 (1961)

Basionym: *Jungermannia trapezia* Nees

Cheilolejeunea trifaria (Reinw., Blume & Nees) Mizut., Journal of the Hattori Botanical Laboratory 27: 132 (1964)

Basionym: *Jungermannia trifaria* Reinw., Blume & Nees

Cheilolejeunea ventricosa (Schiffn.) X.-L.He, Acta Botanica Fennica 163: 60 (1999)

Basionym: *Pycnolejeunea ventricosa* Schiffn.

Cheilolejeunea vittata (Steph. ex Hoffm.) R.M.Schust. & Kachroo, Journal of the Linnean Society, Botany 56: 509 (1961)

Basionym: *Pycnolejeunea vittata* Steph. ex G.Hoffm.

Cheilolejeunea wattsiana Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 102 (1914) ≡ **Lejeunea howeana** Grolle

Original material: Lord Howe Island, Watts 84.

Cheilolejeunea weymouthiana Steph., Species Hepaticarum 5: 675 (1914) = **Cheilolejeunea mimosa** (Hook.f. & Taylor) R.M.Schust.

Original material: Hab. Tasmania.

Cheilolejeunea xanthocarpa (Lehm. & Lindenb.) Malombe, Acta Botanica Hungarica 51(3–4): 326 (2009)

Basionym: *Jungermannia xanthocarpa* Lehm. & Lindenb.

Chiastocaulon Carl, Flora 126: 59 (1932)

Chiastocaulon biseriale (Lehm. & Lindenb.) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs, Organisms Diversity and Evolution 16: 491 (2016)

Basionym: *Plagiochila biserialis* Lehm. & Lindenb.

Chiastocaulon braunianum (Nees) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs, Organisms Diversity and Evolution 16: 491 (2016)

Basionym: *Jungermannia brauniana* Nees

#Chiastocaulon conjugatum (Hook.) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs, Organisms Diversity and Evolution 16: 492 (2016)

Basionym: *Jungermannia conjugata* Hook.

Chiastocaulon conjugatum was reported from Australia based on misidentifications of other species including *Plagiochila retrospectans*, it is endemic to New Zealand (Renner et al. 2016b).

Chiastocaulon dendroides (Nees) Carl, Flora 126: 59 (1932)

Basionym: *Jungermannia dendroides* Nees

Chiastocaulon fasciculatum M.A.M.Renner, Australian Systematic Botany 31: 488 (2018)

Original material: Queensland: Cook District: Daintree National Park, Thornton Peak summit complex, 16°09′52″S, 145°22′27″E, 1283 m, 14 Aug. 2017, *M.A.M. Renner 8491, S. Worboys, C. Clarke, T. Hawkes, L. Mulkearns & A.R. Field* (holo: NSW; iso: BRI, CANB, G, LAE, MEL).

Chiastocaulon flamabile M.A.M.Renner, Australian Systematic Botany 29: 379 (2016)

Original material: New Zealand: North Island: Central Plateau, Maunganuioteao River catchment, Erua Forest, track to Tapapakurua Falls, 39°10′48″S 175°22′23″E, 850 m, 24 Nov. 2013 *M.A.M. Renner 6783* (holo: NSW 898898; iso: AK, CHR, F, G).

Chiastocaulon geminifolium (Mitt.) M.A.M.Renner, Australian Systematic Botany 29: 382 (2016)

Basionym: *Plagiochila geminifolia* Mitt.

Chiastocaulon oppositum (Reinw., Blume & Nees) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs, Organisms Diversity and Evolution 16: 492 (2016)

Basionym: *Jungermannia opposita* Reinw., Blume & Nees

Chiastocaulon pachycephalum (De Not.) Herzog, Transactions of the British Bryological Society 1: 286 (1950)

Basionym: *Plagiochila pachycephala* De Not.

Chiastocaulon proliferum (Mitt.) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs, Organisms Diversity and Evolution 16: 492 (2016)

Basionym: *Plagiochila prolifera* Mitt.

Chiloscyphus Corda, Naturalientausch 12: 651 (1829), *nom. cons.*

Chiloscyphus affinis Gottsche, Linnaea 28: 555 (1856) ≡ **Chiloscyphus austrigenus** subsp. **okaritanus** (Steph.) J.J.Engel

Chiloscyphus allodontus (Hook.f. & Taylor) E.A.Hodgs., Transactions and Proceedings of the Royal Society of New Zealand 78: 496 (1950) ≡ **Heteroscyphus allodontus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Basionym: *Jungermannia allodonta* Hook.f. & Taylor

Chiloscyphus ammophilus Colenso, Transactions and Proceedings of the New Zealand Institute 21: 59 (1889) ≡ **Heteroscyphus ammophilus** (Colenso) R.M.Schust.

Original material: Hab. On the ground with other small plants, sandy spots, sides of Mount Tongariro, County of East Taupo ; 1887 : Mr. H. Hill.

Chiloscyphus archeri J.J.Engel & R.M.Schust., Nova Hedwigia 39: 410 (1985) = **Cryptolophocolea trialata** (Gottsche) L.Söderstr.

Replaced synonym: Lophocolea tasmanica Mitt.

Chiloscyphus argutus (Reinw. Blume & Nees) Nees, Synopsis Hepaticarum 2: 183 (1845) = **Heteroscyphus argutus** (Reinw., Blume & Nees) Schiffn.

Basionym: *Jungermannia arguta* Reinw., Blume & Nees

Chiloscyphus asperrimus Steph., Hepaticarum species novae V. Hedwigia 33: 1 (1894) = **Saccogynidium decurvum** (Mitt.) Grolle

Original material: Hab. Tasmania occid. ad rivulorum ripas terricola. leg. J. B. Moore. Comm. F. v. Miiller, Melbourne.

Chiloscyphus australis Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 2: 189 (1845) ≡ **Leptoscyphus australis** (Gottsche, Lindenb. & Nees) R.M.Schust.

Chiloscyphus austrigenus (Hook.f. & Taylor) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 411 (1985)

Basionym: *Jungermannia austrigena* Hook.f. & Taylor

Chiloscyphus austrigenus subsp. **okaritanus** (Steph.) J.J.Engel, Journal of the Hattori Botanical Laboratory 72: 113 (1992)

Basionym: *Lophocolea okaritana* Steph.

Chiloscyphus biciliatus (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 707 (1847) = **Heteroscyphus allodontus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Basionym: *Jungermannia biciliata* Hook.f. & Taylor

Chiloscyphus billarderii (Schwägr.) Nees, Synopsis Hepaticarum 2: 174 (1845) ≡ **Heteroscyphus billarderii** (Schwägr.) Schiffn.

Basionym: *Jungermannia billarderii* Schwägr.

Chiloscyphus billarderii f. *ciliatus* (Steph.) Rodway, Tasmanian Bryophyta 2: 52 (1916) ≡ **Heteroscyphus ciliatus** (Steph.) Schiffn.

Basionym: *Chiloscyphus ciliatus* Steph.

Chiloscyphus billarderii f. *integrifolius* Rodway, Tasmanian Bryophyta 2: 52 (1916) ≡ **Heteroscyphus billarderii** var. **clasmatocoleoides** (J.J.Engel & G.L.Merr.) J.J.Engel

Original material: Tasmania, Mt. Hartz Plateau, Adamson Peak, Dec. 1914, Rodway

Chiloscyphus billarderii β *hookerianus* Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 2: 175 (1845) ≡ **Heteroscyphus ciliatus** (Steph.) Schiffn.

Original material: Habitat at sinu Dusky Bay Novae Zeelandiae (Menzies); in Insula van Diemen (La Billardiere Hb. Hk. et L.) ; in Nova Hollandia (Schwaegrichen in Hb. L. , Sieber in Hb. N. n. 34 et n. 55.) ; in Campbells Island et in Insulis Auckland (Dr. Hooker jun.).

The original material cited includes three infraspecific entities, α *communis*, β *hookerianus*, and γ. Gottsche et al. (1845) do not attribute these materials to entities.

Chiloscyphus bispinosus (Hook.f. & Taylor) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 411 (1985)

Basionym: *Jungermannia bispinosa* Hook.f. & Taylor

#Chiloscyphus bowieanus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 411 (1985)

Basionym: *Lophocolea bowieana* Steph.

The type material of the basionym, *Lophocolea boweniana* Steph., is from Vanuatu, not Australia as Schuster and Engel (1985) report. Given the Australian report is based on an error of interpretation, and the absence of other specimens substantiating the presence of this species in Australia, we exclude *Chiloscyphus bowieanus* from Australia,

Chiloscyphus brevis (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 412 (1985) ≡ **Chiloscyphus perpusillus** (Hook.f. & Taylor) J.J.Engel

Basionym: *Lophocolea brevis* Steph.

Chiloscyphus calcareus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 412 (1985)

Basionym: *Lophocolea calcarea* Steph.

Chiloscyphus calcareus was reported for Victoria by Scott and Bradshaw (1985) but is regarded as a New Zealand endemic species by Engel (2010) and Engel and Glenny (2018), whom we follow here.

Chiloscyphus cambewarranus Steph., Bulletin de l'Herbier Boissier Series 2 8: 64 (1908) ≡ **Heteroscyphus allodontus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Original material: Hab. Australia, Cambewarra (Forsyth).

Chiloscyphus canaliculatus Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 5: 710 (1847)

Chiloscyphus ciliatus Steph., Hedwigia 32: 320 (1893) ≡ **Heteroscyphus ciliatus** (Steph.) Schiffn.

Chiloscyphus circumdentatus W.Martin & E.A.Hodgs., Transactions and Proceedings of the Royal Society of New Zealand 78: 496 (1950) ≡ **Heteroscyphus billarderii** (Schwägr.) Schiffn.

Chiloscyphus communis Steph., Bulletin de l'Herbier Boissier Series 2 7: 839 (1907) = **Heteroscyphus coalitus** (Hook.) Schiffn.

Original material: Hab. Java, Sumatra, Celebes, Nova Guinea, Timor, Samoa, Andaman Insulae, Queensland, Assam, Sikkim, Japan, valde communis. Ch. coalitus ist eine australische Pflanze. Daher die Aenderung des Namens.

Chiloscyphus compactus Colenso, Transactions and Proceedings for the New Zealand Institute 21: 63 (1889) [1888] ≡ **Leptoscyphus compactus** (Colenso) J.J.Engel

Original material: Hab. On the ground in wet woods in the interior, Taupo, &c., forming pretty large compact patches.

Chiloscyphus conjugatus Mitt., Hepaticae. The botany of the Antarctic voyage of H.M. Discovery ships Erebus and Terror. III. Flora Tasmaniae 2(8): 227 (1859) ≡ **Heteroscyphus conjugatus** (Mitt.) J.J.Engel & R.M.Schust.

Original material: Hab. In a rivulet near the Acheron River, with Gottschea ciliata, G. Lehmanniana, and G. pinnatifolia, October 2nd 1845, Gunn.

Chiloscyphus conjugatus f. *dentatus* Rodway, Tasmanian Bryophyta 2: 52 (1916) = **Heteroscyphus conjugatus** (Mitt.) J.J.Engel & R.M.Schust.

Chiloscyphus connatifolius J.J.Engel, Phytologia 83(1): 42 (1997) = **Cryptolophocolea connatifolia** (J.J.Engel) L.Söderstr.

Original material: Tasmania: Gordon River, Gorge Creek, near Pine Landing, sea level, *Engel 14648* (holo: F; iso: HO).

Chiloscyphus cordifolius Rodway, Papers and Proceedings of the Royal Society of Tasmania 1915: 106 ≡ **Clasmatocolea notophylla** (Hook.f. & Taylor) Grolle

Chiloscyphus corticola (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 413 (1985) = **Chiloscyphus subemarginatus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Basionym: *Lophocolea corticola* Steph.

Chiloscyphus cuneistipulus Steph., Hepaticarum species novae IV. Hedwigia 32: 322 (1893) ≡ **Heteroscyphus cuneistipulus** (Steph.) Schiffn.

Original material: Hab. N. Zelandia. Greymouth. Helms. Ampb. forma facile distinguenda.

Chiloscyphus cuspidatus (Nees) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 413 (1985)

Basionym: *Lophocolea bidentata* f. *cuspidata* Nees

Chiloscyphus cymbaliferus (Hook.f. & Taylor) Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 5: 711 (1847) ≡ **Tetracymbaliella cymbalifera** (Hook.f. & Taylor) Grolle

Basionym: *Jungermannia cymbalifera* Hook.f. & Taylor

Chiloscyphus dargonius Gottsche, Linnaea 28: 554 (1856) = **Chiloscyphus novae-zeelandiae** var. **meridionalis** (Steph.) J.J.Engel

Original material: Hab. apud Dargo

Chiloscyphus decipiens Gottsche, Synopsis Hepaticarum 2: 176 (1845) ≡ **Tetracymbaliella decipiens** (Gottsche) Grolle

Original material: Hab. In sinu Dusky Bay dicto Novae Zeelandiae (Menzies in Hb. Hk.); in Insulis Auckland (Dr. Hooker jun. in Hb. Taylor).

Chiloscyphus decoloratus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 414 (1985) ≡ **Chiloscyphus perpusillus** (Hook.f. & Taylor) J.J.Engel

Basionym: *Lophocolea decolorata* Steph.

#Chiloscyphus divaricatus (Hook.f. & Taylor) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 414 (1985)

Basionym: *Lophocolea divaricata* Hook.f. & Taylor

The basionym *Lophocolea divaricata* was listed as synonym of *L. bidentata* by Bastow (1888) for Tasmania, *Chiloscyphus divaricatus* is an accepted species of the Americas, that does not occur in Australia (Engel 2010).

Chiloscyphus echinellus (Lindenb. & Gottsche) Mitt., Flora Novae-Zelandiae 2(6): 141 (1854) ≡ **Heteroscyphus echinellus** (Lindenb. & Gottsche) J.J.Engel & Xiao L.He

Basionym: *Lophocolea echinella* Lindenb. & Gottsche

Chiloscyphus edentatus J.J.Engel, Phytologia 83(1): 43 (1997) ≡ **Cryptolophocolea edentata** (J.J.Engel) L.Söderstr.

Original material: Tasmania: Cradle Mtn-Lake St. Clair National Park, Ballroom Forest, SW side of Lake Dove, 950–1000 m, *Engel 13993* (holo: F; iso: HO).

Chiloscyphus endlicherianus (Nees) Nees, Synopsis Hepaticarum 2: 184 (1845) = **Heteroscyphus argutus** (Reinw., Blume & Nees) Schiffn.

Basionym: *Jungermannia endlicheriana* Nees

Chiloscyphus excisifolius (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 414 (1985)

Basionym: *Lophocolea excisifolia* Steph.

Chiloscyphus fertilis J.J.Engel, Phytologia 83(1): 43 (1997)

Original material: New South Wales: Lane Cove, *Forsyth 60* (NSW).

Chiloscyphus fissistipulus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 415 (1985) = **Chiloscyphus rupicola** (Steph.) J.J.Engel & R.M.Schust.

Basionym: *Lophocolea fissistipula* Steph.

Chiloscyphus fissistipus (Hook.f. Taylor) Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 175 (1845) ≡ **Heteroscyphus fissistipus** (Hook.f. & Taylor) Schiffn.

Basionym: *Jungermannia fissistipa* Hook.f. & Taylor

Chiloscyphus fissistipus f. *integrifolius* Rodway, Tasmanian Bryophyta 2: 53 (1916) ≡ **Heteroscyphus ammophilus** (Colenso) R.M.Schust.

Chiloscyphus fissistipus var. *longifolius* Carrington & Pearson, Proceedings of the Linnean Society of New South Wales, Series 2 2: 1049 (1888) ≡ **Heteroscyphus fissistipus** (Hook.f. & Taylor) Schiffn.

Original material: Australia, Mossman's Bay, June 1885, Whitelegge

Chiloscyphus gippslandicus J.J.Engel & R.M.Schust., Nova Hedwigia 39: 415 (1985)

Basionym: *Lophocolea lauterbachii* Steph.

Chiloscyphus glaucescens Steph., Bulletin de l'Herbier Boissier Series 2 8: 60 (1908) = **Heteroscyphus supinus** (Hook.f. & Taylor) R.M.Schust.

Original material: Hab. Australia, Blue Mountains (Forsyth), typus in herb. Stephani.

Chiloscyphus gunnianus Mitt., Flora Tasmaniae 2(8): 228 (1859) ≡ **Heteroscyphus gunnianus** (Mitt.) J.J.Engel & R.M.Schust.

Original material: Hab. Tasmania, Gunn.

Chiloscyphus helmsianus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 416 (1985) ≡ **Cryptolophocolea helmsiana** (Steph.) L.Söderstr.

Basionym: *Lophocolea helmsiana* Steph.

#Chiloscyphus herzogii J.J.Engel & R.M.Schust., Nova Hedwigia 39: 416 (1985)

Replaced synonymLophocolea decurrens Herzog

Chiloscyphus herzogii was listed for Tasmania by McCarthy (2003) but was regarded as a New Zealand endemic by Engel (2010) and Engel & Glenny (2019a), whom we follow here.

Chiloscyphus heterophyllus Steph., Species Hepaticarum 6: 308 (1922) ≡ **Leptoscyphus heterophyllus** (Steph.) J.J.Engel

Original material: Hab. Tasmania (Weymouth legit)

Chiloscyphus howeanus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 416 (1985)

Basionym: *Lophocolea howeana* Steph.

Chiloscyphus humilis (Hook.f. & Taylor) Hassel, Nova Hedwigia 63: 504 (1996) ≡ **Clasmatocolea humilis** (Hook.f. & Taylor) Grolle

Chiloscyphus inflatistipulus Steph., Species Hepaticarum 6: 309 (1922) = **Tetracymbaliella decipiens** (Gottsche) Grolle

Original material: Australia orientalis (Wilhelmi legit)

Chiloscyphus inflexispinus (Hook.f. & Taylor) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 417 (1985) ≡ **Clasmatocolea inflexispina** (Hook.f. & Taylor) J.J.Engel

Basionym: *Jungermannia inflexispina* Hook.f. & Taylor

Chiloscyphus kirkii Steph., Hepaticarum species novae IV. Hedwigia 32: 323 (1893) = **Heteroscyphus fissistipus** var. **repandus** J.J.Engel

Original material: Hab. Nova Zelandia, Tauranga leg. Kirk 115

Engel & Glenny (2018a) placed *Chiloscyphus kirkii* as a synonym of *Heteroscyphus fissistipus* var. *repandus*, but it is unclear how this variety differs from *H. supinus*, except by the 'often undulate' ventral margin. This variety will key to *H. supinus* in the *Heteroscyphus* key of Engel and Glenny (2018a).

Chiloscyphus knightii Steph., Species Hepaticarum 3: 245 (1908) ≡ **Heteroscyphus knightii** (Steph.) Grolle

Original material: Hab. New Zealand (Knight)

#Chiloscyphus latifolius (Nees) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 418 (1985)

Basionym: *Lophocolea latifolia* Nees

This species (in *Lophocolea* often treated as *L. coadunata*) was reported for Australia by Bastow (1888) and Carrington and Pearson (1888) on the basis of misidentifications of other species. *Chiloscyphus latifolius* is an accepted species from Europe that does not occur in Australia (Engel 2010). It follows from Engel's (2010) exclusion of *C. latifolius* from Australia that infra-specific taxa described from Tasmania, including *Lophocolea bidentata* var. *tasmanica*, *L. bidentata* f. *spinosior* and *L. bidentata* f. *simplicior* do not belong in synonymy of *Chiloscyphus latifolius*.

Chiloscyphus laxus Mitt., Flora Novae-Zelandiae 2(6): 142 (1854)

Original material: Hab. Northern and Middle Islands: Auckland, Sinclair; creeping over Gottschea appendiculata, Lyall.

#Chiloscyphus lentus (Hook.f. & Taylor) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 418 (1985)

Basionym: *Jungermannia lenta* Hook.f. & Taylor

Chiloscyphus lentus is regarded as a New Zealand endemic by Engel (2010) and Engel & Glenny (2018a), whom we follow here. Australian records are based on misidentifications, mostly of *C. subporosus* (Engel 2010).

#Chiloscyphus leptanthus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 418 (1985)

Basionym: *Jungermannia leptantha* Hook.f. & Taylor

Recorded, as *Lophocolea alternifolia*, by Weymouth (1903) for Tasmania. *Chiloscyphus alternifolius* is an accepted species of the Americas, that does not occur in Australia (Engel 2010).

Chiloscyphus leucophyllus (Hook.f. & Taylor) Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 2: 181 (1845) ≡ **Cryptolophocolea leucophylla** (Hook.f. & Taylor) L.Söderstr.

Basionym: *Jungermannia leucophylla* Hook.f. & Taylor

Chiloscyphus levieri Steph., Bulletin de l'Herbier Boissier Series 2 8: 132 (1908) ≡ **Heteroscyphus levieri** (Steph.) Schiffn.

Original material: Hab. Tasmania (Weymouth).

Chiloscyphus limosus Carrington & Pearson, Papers and Proceedings of the Royal Society of Tasmania 1887: 6 (1888) ≡ **Heteroscyphus limosus** (Carrington & Pearson) Schiffn.

Original material: Hab. muddy places by stream, Proctor's road, Brown's River, Nov. 1885.

Chiloscyphus limosus var. *laevigatus* Carrington & Pearson, Proceedings of the Linnean Society of New South Wales, Series 2 2: 1050 (1888) = **Heteroscyphus limosus** (Carrington & Pearson) Schiffn.

Original material: Hab.- on wet rocks, Northwood, Lane Cove River, Aug 1885 (15).

Chiloscyphus lingulatus Colenso, Transactions and Proceedings of the New Zealand Institute 21: 61 (1889) ≡ **Heteroscyphus lingulatus** (Colenso) J.J.Engel & R.M.Schust.

Original material: Hab. on the ground, damp shady forests near Dannevirke. County of Waipawa, 1888: W.C.

Chiloscyphus longiciliatus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 418 (1985)

Basionym: *Lophocolea longiciliata* Herzog

Chiloscyphus longifolius (Carrington & Pearson) Steph., Hepaticarum species novae IV. Hedwigia 32: 324 (1893) ≡ **Heteroscyphus fissistipus** (Hook.f. & Taylor) Schiffn.

Basionym: *Chiloscyphus fissistipus* var. *longifolius* Carrington & Pearson

Chiloscyphus longistipulus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 49: 318 (1985) = **Chiloscyphus subemarginatus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Basionym: *Lophocolea longistipula* Steph.

Chiloscyphus lyallii Mitt., Flora Novae-Zelandiae 2(6): 140 (1854) ≡ **Heteroscyphus lyallii** (Mitt.) R.M.Schust.

Original material: Hab. Middle Island: growing with C. coalitus (Hook.), Port Preservation, Lyall.

Chiloscyphus macrolobus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 418 (1985) ≡ **Chiloscyphus perpusillus** (Hook.f. & Taylor) J.J.Engel

Basionym: *Lophocolea macroloba* Steph.

Chiloscyphus macrostipulus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 418 (1985) ≡ **Chiloscyphus novae-zeelandiae** var. **novae-zeelandiae**

Basionym: *Lophocolea macrostipula* Steph.

Chiloscyphus maximus Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 103 (1914) = **Heteroscyphus coalitus** (Hook.) Schiffn.

Original material: Hab. Australia (Etta's Glen, Black Spur, Vict.): Watts 968.

Chiloscyphus menziesii Mitt., Flora Novae-Zelandiae 2(6): 139 (1854) ≡ **Heteroscyphus menziesii** (Mitt.) J.J.Engel

Original material: Hab. Picked from a Lichen gathered in New Zealand by Mr. Menzies (Hi. Mitten). On the bark of trees with Polyotus Taylori and Gottschea Moides, Port Preservation, Lyall.

#Chiloscyphus minor (Nees) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 419 (1985)

Basionym: *Lophocolea minor* Nees

This Holarctic species was reported for Australia by Bastow (1888) and Carrington and Pearson (1888) on the basis of misidentifications of other species. *Chiloscyphus minor* is an accepted species that does not occur in Australia (Engel 2010).

Chiloscyphus mittenianus var. *obtusus* J.J.Engel, Phytologia 83: 44 (1998)

Original material: New Zealand: South Island: Otago Prov., Mt Maungatua, W of Mosgiel, 760 m, *Engel 17768* (F).

Chiloscyphus monoicus J.J.Engel & R.M.Schust., Nova Hedwigia 39: 419 (1985)

Basionym: *Lophocolea floribunda* Steph.

Chiloscyphus montanus Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 103 (1914), *nom. illeg.* = **Geocalyx caledonicus** Steph.

Original material: Hab. Australia (Neate's Glen Blackheath); Watts 927

Chiloscyphus moorei Steph., Hepaticarum species novae V. Hedwigia 33: 2 (1894) ≡ **Heteroscyphus conjugatus** (Mitt.) J.J.Engel & R.M.Schust.

Original material: Hab. Tasmania occid. Jones Track, in sylvis humidis terricola vel super truncos putridos in plagas latissimas expalnsa. leg. J. B Moore. Comm. F. v. Muller, Melbourne.

Chiloscyphus muelleri Gottsche, Linnaea 28: 555 (1856) ≡ **Chiloscyphus austrigenus** subsp. **okaritanus** (Steph.) J.J.Engel

Original material: Habitat in alpus australibus

Chiloscyphus multifidus Steph., Bulletin de l'Herbier Boissier Series 2 8: 132 (1908) ≡ **Heteroscyphus multifidus** (Steph.) J.J.Engel & R.M.Schust.

Original material: Hab. Tasmania (J.B.Moore)

Chiloscyphus multipennus J.J.Engel & R.M.Schust., Nova Hedwigia 39: 420 (1985), *nom. illeg.* = **Cryptolophocolea pallida** (Mitt.) L.Söderstr.

Jungermannia multipennus Hook.f. & Taylor is not available to serve as the basionym for the combination being a later homonym. Thus, Engel and Schuster's name is a nom. nov., but it is superfluous.

Chiloscyphus muricatus (Lehm.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 419 (1985)

Basionym: *Jungermannia muricata* Lehm.

Chiloscyphus muricellus De Not., Memoria della Reale Accademia delle Scienze Torino, ser. 2 28: 24 (1874) ≡ **Saccogynidium muricellum** (De Not.) Grolle

Chiloscyphus novae-zeelandiae (Lehm. & Lindenb.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 420 (1985)

Basionym: *Jungermannia novae-zeelandiae* Lehm. & Lindenb.

Chiloscyphus novae-zeelandiae var. **grandistipulus** (Schiffn.) J.J.Engel, Contributions from the University of Michigan Herbarium 18: 110 (1992)

Basionym: *Lophocolea grandistipula* Schiffn.

Chiloscyphus novae-zeelandiae var. **meridionalis** (Steph.) J.J.Engel, Contributions from the University of Michigan Herbarium 18: 109 (1992)

Basionym: *Lophocolea meridionalis* Steph.

Chiloscyphus odoratus Mitt., Flora Novae-Zelandiae 2(6): 140 (1854) = **Heteroscyphus triacanthus** (Hook.f. & Taylor) Schiffn.

Original material: New Zealand, Auckland, Sinclair

Chiloscyphus oldfieldianus (Steph.) J.J.Engel & R.M.Schust., Hova Hedwigia 39: 420 (1985) = **Chiloscyphus canaliculatus** var. **canaliculatus**

Basionym: *Lophocolea oldfieldiana* Steph.

Chiloscyphus pallidovirens (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 2: 178 (1845) = **Cryptolophocolea pallidovirens** (Hook.f. & Taylor) L.Söderstr.

Basionym: *Jungermannia pallidovirens* Hook.f. & Taylor

Chiloscyphus pallidus (Mitt.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 420 (1985) ≡ **Cryptolophocolea pallida** (Mitt.) L.Söderstr.

Basionym: *Lophocolea pallida* Mitt.

Chiloscyphus pearsonii J.J.Engel & R.M.Schust., Nova Hedwigia 39: 421 (1985) = **Cryptolophocolea trialata** (Gottsche) L.Söderstr.

Basionym: *Lophocolea bicuspidata* Pearson

Chiloscyphus perpusillus (Hook.f. & Taylor) J.J.Engel, Nova Hedwigia 56: 242 (1993)

Basionym: *Jungermannia perpusilla* Hook.f. & Taylor

Chiloscyphus physanthus (Hook.f. & Taylor) Mitt., Flora Novae-Zelandiae 2(6): 141 (1854) = **Leptoscyphus physanthus** (Hook.f. & Taylor) J.J.Engel

Basionym: *Jungermannia physantha* Hook.f. & Taylor

Chiloscyphus piperitus Mitt., Flora Novae-Zelandiae 2(6): 141 (1854) = **Heteroscyphus allodontus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Original material: Hab. New Zealand, herb. Mitten.

Chiloscyphus planiusculus (Hook.f. & Taylor) J.J.Engel, Journal of the Hattori Botanical Laboratory 68: 315 (1990)

Basionym: *Jungermannia planiuscula* Hook.f. & Taylor

#Chiloscyphus polyanthos (L.) Corda, Naturalientausch 12: 651 (1829)

Basionym: *Jungermannia polyanthos* L.

A northern hemispheric species reported for Australia in error. *Chiloscyphus polyanthos* does not occur in Australia.

Chiloscyphus rarus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 422 (1985)

Basionym: *Lophocolea rara* Steph.

Chiloscyphus rupicola (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 422 (1985)

Basionym: *Lophocolea rupicola* Steph.

#Chiloscyphus sabuletorum (Hook.f. & Taylor) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 422 (1985)

Chiloscyphus sabuletorum is an accepted species of the Americas, that does not occur in Australia (Engel 2010).

Chiloscyphus sellingii (S.W.Arnell) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 423 (1985) = **Chiloscyphus novae-zeelandiae** var. **novae-zeelandiae**

Basionym: *Lophocolea sellingii* S.W.Arnell

Chiloscyphus semiteres (Lehm. & Lindenb.) Lehm. & Lindenb., Synopsis Hepaticarum 2: 190 (1845)

Basionym: *Jungermannia semiteres* Lehm.

Chiloscyphus semiteres var. **retusus** J.J.Engel, Phytologia 83(1): 44 (1997)

Chiloscyphus simillimus Steph., Species Hepaticarum 6: 314 (1922) ≡ **Heteroscyphus billarderii** (Schwägr.) Schiffn.

Original material: Hab. Tasmania (Weymouth legit).

Chiloscyphus sinuosus (Hook.) Nees, Synopsis Hepaticarum 2: 175 (1845 ≡ **Heteroscyphus sinuosus** (Hook.) Schiffn.

Basionym: *Jungermannia sinuosa* Hook.

Chiloscyphus spinosus Gottsche ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 2: 175 (1845), *nom. inval.* = **Heteroscyphus fissistipus** (Hook.f. & Taylor) Schiffn.

Chiloscyphus spongiosus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 423 (1985) = **Chiloscyphus rupicola** (Steph.) J.J.Engel & R.M.Schust.

Basionym: *Lophocolea spongiosa* Steph.

Chiloscyphus squamatus (Herzog) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 423 (1985) = **Chiloscyphus semiteres** (Lehm. & Lindenb.) Lehm. & Lindenb.

Basionym: *Lophocolea squamata* Herzog

Chiloscyphus strongylophyllus (Hook.f. & Taylor) Hassel, Nova Hedwigia 63: 513 (1996) ≡ **Clasmatocolea strongylophylla** (Hook.f. & Taylor) Grolle

Basionym: *Jungermannia strongylophylla* Hook.f. & Taylor

Chiloscyphus subemarginatus (Hook.f. & Taylor) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 423 (1985)

Basionym: *Lophocolea subemarginata* Hook.f. & Taylor

Chiloscyphus subopposítus J.J.Engel, Phytologia 83(1): 45 (1997) ≡ **Cryptolophocolea subopposita** (J.J.Engel) L.Söderstr.

Original material: Tasmania: Cradle Mtn-Lake St. Clair National Park, Pine Valley, Cephissus Falls, NNW of Lake St. Clair, 850 m, *Engel 14247* (holo: F; iso: HO).

Chiloscyphus subporosus (Mitt.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 423 (1985)

Basionym: *Lophocolea subporosa* Mitt.

Chiloscyphus subviridis (Hook.f. & Taylor) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 424 (1985)

Basionym: *Jungermannia subviridis* Hook.f. & Taylor

Chiloscyphus subviridis is an accepted species of South America, that does not occur in Australia (Engel 2010).

Chiloscyphus supinus Hook.f. & Taylor, New Hepaticae. London Journal of Botany 5: 284 (1846) ≡ **Heteroscyphus supinus** (Hook.f. & Taylor) R.M.Schust.

Original material: Hab. New Zealand, Bay of Islands, Dr Sinclair, herb. Hooker.

Chiloscyphus tasmanicus Steph., Species Hepaticarum 3: 249 (1908) ≡ **Heteroscyphus tasmanicus** (Steph.) J.J.Engel & R.M.Schust.

Original material: Hab. Tasmania (Moore).

#Chiloscyphus textilis (Hook.f. & Taylor) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 424 (1985)

Basionym: *Jungermannia textilis* Hook.f. & Taylor

Listed, as *Lophocolea textilis*, in synonymy of *Lophocolea bidentata* by Bastow (1888). *Chiloscyphus textilis* is an accepted species of South America that does not occur in Australia (Engel 2010).

Chiloscyphus trapezioides Sande Lac., Nederlandsch Kruidkundig Archief 3: 417 (1853) ≡ **Conoscyphus trapezioides** (Sande Lac.) Schiffn.

Chiloscyphus triacanthus (Hook.f. & Lev.) Steph., Species Hepaticarum 3: 247 (1908) ≡ **Heteroscyphus triacanthus** (Hook.f. & Taylor) Schiffn.

Basionym: *Jungermannia triacantha* Hook.f. & Lev.

Chiloscyphus trialatus (Gottsche) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 424 (1985)

Basionym: *Lophocolea trialata* Gottsche

Chiloscyphus tridentatus Mitt., Flora Tasmaniae 2(8): 228 (1859) = **Heteroscyphus knightii** (Steph.) Grolle

Original material: Hab. Tasmania, Dumont d'Urville, Archer. Damp ground : Grass-tree Hill, Oldfield. St. Patrick's River, Gunn

Chiloscyphus trispinosus Mitt., Flora Novae-Zelandiae 2(6): 140 (1854) = **Heteroscyphus lyallii** (Mitt.) R.M.Schust.

Original material: Hab. Middle Island, Bligh's Sound, creeping over C. coalitus etc, Lyall.

Chiloscyphus varians (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 425 (1985) = **Heteroscyphus varians** (Steph.) J.J.Engel

Basionym: *Lophocolea varians* Steph.

Chiloscyphus vermicularis (Lehm.) Hassel, Nova Hedwigia 63: 513 (1996) = **Clasmatocolea vermicularis** (Lehm.) Grolle

Basionym: *Jungermannia vermicularis* Lehm.

Chiloscyphus verrucosus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 425 (1985) = **Cryptolophocolea leucophylla** (Hook.f. & Taylor) L.Söderstr.

Basionym: *Lophocolea verrucosa* Steph.

#Chiloscyphus villosus (Mitt. ex Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 425 (1985)

Basionym: *Lophocolea villosa* Mitt. ex Steph.

Chiloscyphus villosus is regarded as a New Zealand endemic by Engel (2010) and Engel & Glenny (2018a), whom we follow here.

Chiloscyphus wattsianus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 425 (1985) = **Chiloscyphus canaliculatus** var. **canaliculatus**

Basionym: *Lophocolea wattsiana* Steph.

Chiloscyphus weymouthianus Steph., Bulletin de l'Herbier Boissier Series 2 8: 135 (1908) = **Heteroscyphus menziesii** (Mitt.) J.J.Engel

Original material: Hab. Tasmania (Weymouth).

Chiloscyphus zollingeri Gottsche, Natuurkundig Tijdschrift voor Nederlandsch-Indië 4: 576 (1853) ≡ **Heteroscyphus zollingeri** (Gottsche) Schiffn.

Original material: Zollinger No. 341.

Chonecolea Grolle, Revue Bryologique et Lichenologique 25: 294 (1956)

Chonecolea doellingeri (Nees) Grolle, Revue Bryologique et Lichenologique 25: 295 (1956)

Basionym: *Jungermannia doellingeri* Nees

#Cladoradula (Spruce) M.A.M.Renner, Gradst., Ilk.-Borg. & F.R.Oliveira-da-Silva, Bryophyte Diversity and Evolution 45: 105 (2022)

Basionym: *Radula* subg. *Cladoradula* Spruce

#Cladoradula boryana (F.Weber) M.A.M.Renner, Gradst., Ilk.-Borg. & F.R.Oliveira-da-Silva, Bryophyte Diversity and Evolution 45: 105 (2022)

Basionym: *Jungermannia boryana* F.Weber

Radula gottscheana Taylor was listed in McCarthy (2003) as a *pro parte* synonym of *Radula javanica*, but it is likely that the name McCarthy intended to list was *Radula gottscheana* F.Muell. *Radula gottscheana* Taylor was treated as a synonym of *Cladoradula boryana*, a species that does not occur in Australia, by Renner et al. (2022).

Clandarium (Grolle) R.M.Schust., New Manual of Bryology 1: 541 (1983)

Basionym: *Blepharidophyllum* subg. *Clandarium* Grolle

Clandarium xiphophyllum (Grolle) R.M.Schust., Phytologia 56(2): 68 (1984)

Basionym: *Blepharidophyllum xiphophyllum* Grolle

Clasmatocolea Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 440 (1885)

Clasmatocolea amplectens (Mitt.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 410 (1985) = **Clasmatocolea inflexispina** (Hook.f. & Taylor) J.J.Engel

Basionym: *Clasmatocolea amplectens* (Mitt.) J.J.Engel & R.M.Schust.

Clasmatocolea angulistipula (Steph.) Grolle, Revue Bryologique et Lichenologique 29: 71 (1960) = **Clasmatocolea strongylophylla** (Hook.f. & Taylor) Grolle

Basionym: *Lophocolea angulistipula* Steph.

Clasmatocolea crassimarginata Grolle, Revue Bryologique et Lichenologique 29: 71 (1960) = **Clasmatocolea marginata** (Steph.) Grolle

Clasmatocolea humilis (Hook.f. & Taylor) Grolle, Revue Bryologique et Lichenologique 29: 72 (1960) = **Clasmatocolea humilis** (Hook.f. & Taylor) Grolle

Basionym: *Jungermannia humilis* Hook.f. & Taylor

Clasmatocolea inflexispina (Hook.f. & Taylor) J.J.Engel, The Bryologist 94: 436 (1991)

Basionym: *Jungermannia inflexispina* Hook.f. & Taylor

Clasmatocolea marginata (Steph.) Grolle, Nova Acta Leopoldina 25 (161): 73 (1962)

Basionym: *Leioscyphus marginatus* Steph.

Clasmatocolea notophylla (Hook.f. & Taylor) Grolle, Journal of Japanese Botany 41: 228 (1966)

Basionym: *Jungermannia notophylla* Hook.f. & Taylor

Clasmatocolea rigens (Hook.f. & Taylor) J.J.Engel, Journal of the Hattori Botanical Laboratory 36: 156 (1973)

Basionym: *Jungermannia rigens* Hook.f. & Taylor

Clasmatocolea strongylophylla (Hook.f. & Taylor) Grolle, Revue Bryologique et Lichenologique 29: 73 (1960)

Basionym: *Jungermannia strongylophylla* Hook.f. & Taylor

Clasmatocolea vermicularis (Lehm.) Grolle, Revue Bryologique et Lichenologique 29: 78 (1960)

Basionym: *Jungermannia vermicularis* Lehm.

Clasmatocolea verrucosa J.J.Engel, The Bryologist 83: 220 (1980)

Original material: Tasmania: E slope of Black Bluff just below summit, S of Burnie, 1250 m, *J.J.Engel 15764* (holo: F; iso: HO).

Cololejeunea (Spruce) Steph., Hedwigia 30 (5): 208 (1891)

Basionym: *Lejeunea* subg. *Cololejeunea* Spruce

Cololejeunea amphibola B.M.Thiers, Beihefte zur Nova Hedwigia 90: 130 (1988)

Cololejeunea aoshimensis (Horik.) S.Hatt., Journal of the Hattori Botanical Laboratory 19: 138 (1958) = **Cololejeunea planissima** (Mitt.) Abeyw.

Basionym: *Leptocolea aoshimensis* Horik.

Cololejeunea appressa (A.Evans) Benedix, Feddes Repertorium Beiheft 134: 31 (1953)

Basionym: *Leptocolea appressa* A.Evans

Cololejeunea baueriana Schiffn., Hedwigia 39: 199 (1900), *nom. inval.* = **Cololejeunea hasskarliana** (Lehm.) Schiffn.

Cololejeunea bistyla Steph., Hedwigia 28: 168 (1889), *nom. inval.* = **Cololejeunea hamata** Steph.

Genus not valid at time of species description.

Cololejeunea bokorensis Tixier, Bryophytorum Bibliotheca 18: 54 (1979) = **Cololejeunea stylosa** Steph.

Cololejeunea cairnsiana Pócs, Polish Botanical Journal 61: 209 (2016)

Original material: Queensland: Paluma Range National Park, Paluma Dam Road, 1.6 km N from the Paluma-Ewan Road, 19°00.02'S 146°10.67'E, 880 m alt., *S. & T. Pócs, A. Cairns, E.A. Brown & Ch. Cargill 01122/Z* (holo: BRI; iso (microslide only): EGR).

Cololejeunea cardiocarpa (Mont.) A.Evans, Memoirs of the Torrey Botanical Club 8: 177 (1902)

Basionym: *Lejeunea cardiocarpa* Mont.

Cololejeunea cordiflora Steph., Hedwigia 34: 246 (1895)

Original material: Hab. Nova Caledonia (Balansa 3694) herb. Bischlerelle.

Cololejeunea diaphana A.Evans, Bulletin of the Torrey Botanical Club 32(4): 184 (1905)

Original material: In hammocks near the homestead trail, between Cutler and Camp Longview (Small & Carter 1365 p.p., 1370 p. p.). No.1365 may be designated the type.

Cololejeunea diaphana var. **cristulata** R.M.Schust., Journal of the Elisha Mitchell Science Society 72: 112 (1956)

Cololejeunea elizabethae Meagher & Pócs, Telopea 20: 61 (2017)

Original material: New South Wales: Lord Howe Island: Smoking Tree Ridge, on track to Goathouse, above junction with Rocky Run track, 31°33′25″S, 159°05′15″E, alt. 140 m, 9 June 2000, *E.A. Brown 2000/12*, *p.p.* (holo: NSW 444684; iso: EGR).

Cololejeunea falcata (Horik.) Benedix, Feddes Repertorium Beiheft 134: 29 (1953)

Basionym: *Physocolea falcata* Horik.

Cololejeunea floccosa (Lehm. & Lindenb.) Steph., Hedwigia 29: 18 (1890)

Basionym: *Jungermannia floccosa* Lehm. & Lindenb.

Cololejeunea floccosa var. **amoenoides** Tixier, Cryptogamie Bryologie Lichenologie 2: 59 (1981)

Cololejeunea floccosa var. **fraseriana** Pócs, Polish Botanical Journal 61: 206 (2016)

Original material: Queensland: Fraser Island (Great Sandy National Park): Pile Valley along Kingfisher Bay-Eurong road, 55 m alt., 25°28.4′S 153°04.3′E, *T. Pócs & H. Streimann 9960/L* (holo: CANB; iso: BRI, CANB, EGR, G, NSW).

Cololejeunea goebelii (Gottsche ex Schiffn.) Schiffn., Conspectus Hepaticarum Archipelagi Indici: 244 (1898) = **Cololejeunea trichomanis** (Gottsche) Besch.

Basionym: *Lejeunea goebelii* Gottsche ex Schiffn.

Cololejeunea gottschei (Steph.) Pande, K.P.Srivast. & Ahmad, Journal of the Indian Botanical Society 36: 345 (1957)

Basionym: *Physocolea gottschei* Steph.

Cololejeunea hamata Steph., Hedwigia 34: 248 (1895)

Original material: Hab. Amboina. Salhoetoe (Dr G. Karsten)

Cololejeunea hasskarliana (Lehm.) Schiffn., Conspectus Hepaticarum Archipelagi Indici: 244 (1898)

Basionym: *Lejeunea hasskarliana* Lehm.

Cololejeunea heinarii Pócs, Polish Botanical Journal 61: 206 (2016)

Original material: Queensland: Fraser Island (Great Sandy National Park), in Wongoolba Creek N of the Central Station, at 45 m alt., 25°28′S, 153°3.7′E,17 Aug. 1999, *T. Pócs & H. Streimann 9963/M* (holo: CANB; iso (microslide only): EGR).

Cololejeunea inflata Steph., Hedwigia 34: 249 (1985)

Original material: Hab. Nova Caledonia (Balansa) Herb. Bischerelle

Cololejeunea inflectens (Mitt.) Benedix, Feddes Repertorium Beiheft 134: 79 (1953)

Basionym: *Lejeunea inflectens* Mitt.

Cololejeunea iwatsukiana (Pócs) Pócs, Polish Botanical Journal 54(1): 6 (2009)

Basionym: *Aphanolejeunea iwatsukiana* Pócs

Cololejeunea kapingaensis H.A.Mill., The Bryologist 59: 170 (1956)

Cololejeunea laevigata (Steph.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 241 (1963)

Basionym: *Physocolea laevigata* Steph.

Cololejeunea lanciloba Steph., Hedwigia 34: 250 (1895)

Original material: Hab. Insularae Nicobaricae (Sulp. Kurz 3917)

Cololejeunea longifolia (Mitt.) Benedix ex Mizut, Journal of the Hattori Botanical Laboratory 26: 184

Basionym: *Lejeunea longifolia* Mitt.

Cololejeunea mamillata (Angstr.) E.A.Hodgs., Transactions of the Royal Society of New Zealand. Botany 3: 184 (1967)

Basionym: *Lejeunea mamillata* Angstr.

Cololejeunea maritima Tixier, Nova Hedwigia 31: 752 (1979)

Cololejeunea microscopica (Taylor) Schiffn., Hepaticae. Die Naturlichen Pflanzenfamilien 1(3): 122 (1893)

Basionym: *Jungermannia microscopica* Taylor

Cololejeunea microscopica is an accepted species with an amphi-Atlantic distribution, which does not occur in Australia (Pocs 2016).

Cololejeunea minutissima (Sm.) Schiffn., Hepaticae. Die Naturlichen Pflanzenfamilien 1(3): 122 (1893) ≡ **Myriocoleopsis minutissima** (Sm.) R.L.Zhu, Y.Yu & Pócs

Basionym: *Jungermannia minutissima* Sm.

Cololejeunea norfolkiensis Steph., Hedwigia 34: 250 (1895) ≡ **Cololejeunea wightii** Steph.

Original material: Hab. Insula Norfolk (Australia) Herb. Bischerelle.

Cololejeunea obliqua (Nees & Mont.) Schiffn., Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie 23: 586 (1897)

Basionym: *Lejeunea obliqua* Nees & Mont.

Cololejeunea ocelloides (Horik.) Mizut., Journal of the Hattori Botanical Laboratory 24: 277 (1961)

Basionym: *Leptocolea ocelloides* Horik.

Cololejeunea papillosa (K.I.Goebel) Mizut., Journal of the Hattori Botanical Laboratory 29: 156 (1966)

Basionym: *Physocolea papillosa* K.I.Goebel

Cololejeunea peculiaris (Herzog) Benedix, Feddes Repertorium 134: 80 (1953)

Basionym: *Physocolea peculiaris* Herzog

Cololejeunea peraffinis (Schiffn.) Schiffn., Conspectus Hepaticarum Archipelagi Indici: 245 (1898)

Basionym: *Lejeunea peraffinis* Schiffn.

Cololejeunea planissima (Mitt.) Abeyw., Ceylon Journal of Science (Biological Sciences) 2: 73 (1959)

Cololejeunea pseudofloccosa (Horik.) Benedix, Feddes Repertorium 134: 36 (1953)

Basionym: *Leptocolea pseudofloccosa* Horik.

Cololejeunea raduliloba Steph., Hedwigia 34: 251 (1895)

Original material: Hab. Tonkin. Khang-Thuong (Bong). Herb. Mus. Paris.

Cololejeunea reniformis M.A.M.Renner, Telopea 23: 182 (2020)

Original material: Queensland: North Kennedy: Tully Falls National Park, Tully Falls Road, Walters Waterhole Track, to Rhyolite Pinnacle, at river crossing, 17°43′33″S 145°32′20″E, c. 800 m, 27 Aug 2014, *M.A.M. Renner 7221 & L.J. Gray* (holo: BRI; iso: NSW 1061475).

Cololejeunea schmidtii Steph., Botanisk Tidsskrift 24: 278 (1902)

Original material: Jungle near Klong Munsé and Nipple (alt. 2000 ft.), on leaves of herbs and small shrubs.

Cololejeunea sintenisii Steph., Westindische Hepaticae. Hedwigia 27: 291 (1888), *nom. inval.* ≡ **Cololejeunea sintenisii** (Steph.) Pócs

Proposed before valid publication of genus.

Cololejeunea sintenisii (Steph.) Pócs, Cryptogamie Bryologie 29: 235 (2008)

Basionym: *Aphanolejeunea sintenisii* Steph.

Cololejeunea stylosa Steph., Transactions of the Connecticut Academy of Arts and Sciences 10(8): 454 (1900)

Cololejeunea tenella Benedix, Feddes Repertorium 134: 55 (1953)

Cololejeunea thiersiae (Pócs) Pócs, Polish Botanical Journal 54(1): 9 (2009)

Basionym: *Aphanolejeunea thiersiae* Pócs

Cololejeunea triapiculata (Herzog) Tixier, Gardens' Bulletin, Singapore 25: 344 (1971)

Basionym: *Leptocolea triapiculata* Herzog

Cololejeunea trichomanis (Gottsche) Besch., Review Bryologie 19: 14 (1892)

Basionym: *Lejeunea trichomanis* Gottsche

Cololejeunea veillonii Tixier, Nova Hedwigia 31: 757, f. 19 (1979)

Cololejeunea verrucosa Steph., Hedwigia 34: 253 (1895)

Original material: Hab. Java (sub nom. Lej. Hasskarliana in Herb. Mus. Vindob.) No. 6346.

Cololejeunea vidaliana Tixier, Natural History Bulletin of the Siam Society 24: 444 (1973)

Cololejeunea wattsiana (Steph.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 241 (1963) = **Cololejeunea lanciloba** Steph.

Basionym: *Leptocolea wattsiana* Steph.

Cololejeunea wightii Steph., Hedwigia 34: 253 (1895)

Original material: Hab. Pulo Palang (Wallich).

Colura (Dumort.) Dumort., Recueil d'Observations sur les Jungermanniacees: 12 (1835)

Basionym: *Jungermannia* sect. *Colura* Dumort.

Colura acroloba (Mont. ex Steph.) Jovet-Ast, Revue Bryologique et Lichenologique 22: 297 (1953)

Basionym: *Lejeunea acroloba* Prantl

Colura acutifolia Jovet-Ast, Revue Bryologique et Lichenologique 22: 281 (1953) = **Colura conica** (Sande Lac.) K.I.Goebel

Original material: Expedition Gunung Beratus East-Borneo, G. Beratus, along the river Tulus, hygrophilous forest, leg. W. Meijer, 3.7.1952, n° 1379 (avec C. Ari), type, vu.

Colura apiculata (Schiffn.) Steph., Species Hepaticarum 5: 936 (1916)

Basionym: *Colurolejeunea apiculata* Schiffn.

Colura ari (Steph.) Steph., Species Hepaticarum 5: 936 (1916)

Basionym: *Colurolejeunea ari* Steph.

Colura australiensis Jovet-Ast, Revue Bryologique et Lichenologique 22: 260 (1953)

Original material: Australie: Mount Bellenden Ker, Queensland. Leg. Walter Hill, 27.11.1873. Determine par C. M. Gottsche comme Colura intortifolia (N. et M.) St. Communique par A. W. Jessep, Melbourne Botanic Gardens. Type.

Colura bisvoluta Herzog & Jovet-Ast, Revue Bryologique et Lichenologique 22: 228 (1953)

Original material: Sumatra occidental: in valle « Lobang-Karbau » prope Fort de Kock, V. Schiffner, Iter indicum 1893-94, n° 3480, 29.7.1894. Type : vu.

Colura conica (Sande Lac.) K.I.Goebel, Annales de Jardin Botanique de Buitenzorg 39: 3 (1928)

Basionym: *Lejeunea conica* Sande Lac.

Colura corynophora (Gottsche, Lindenb. & Nees) Trevis. Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 402 (1877)

Basionym: *Lejeunea corynophora* Gottsche, Lindenb. & Nees

Colura crispiloba Jovet-Ast, Cryptogamie - Bryologie Lichenologie 4: 205 (1983)

Colura herzogii Jovet-Ast, Revue Bryologique et Lichenologique 22: 261 (1953)

Original material: Java : Herb. Hort. Bot. Bogor n° 2953, Java occ., Res. Priangan, G. Gegerbentang, in silvis, praecipue in decl. orient., 1,500-2,000 m., leg. Fr. Verdoorn, VIII, 1930 (67), type, vu, sans perianthe mais avec inflorescence male.

Colura imperfecta Steph., Species Hepaticarum 5: 938 (1916)

Original material: Hab. Salomons Islands

Colura leratii Steph., Species Hepaticarum 5: 939 (1916)

Original material: Hab. Nova Caledonia.

Colura ornata K.I.Goebel, Annales de Jardin Botanique de Buitenzorg 9: 26 (1891)

Original material: in Java

Colura pulcherrima Jovet-Ast, Revue Bryologique et Lichenologique 22: 235 (1953)

Original material: Patagonie, Eden, rampant sur Hymenophyllum tortuosum ; Expedition de la Magicienne 1876-1879, leg. Lud. Savatier, 1857, 24 janvier 1879. Type, in Herb. Mus. Paris, vu.

Colura pulcherrima var. **bartlettii** Jovet-Ast, Cryptogamie - Bryologie Lichenologie 1: 278 (1980)

Original material: New Zealand: Ile du Nord, Hauhungaros Range, 660 m, Kuratau clearing, volcanic plateau, *Bartlett 79/5a* (holo: JE; iso: WELT).

Colura queenslandica B.M.Thiers, Brittonia 39: 177 (1987)

Original material: Queensland: Moreton District: Cooloola National Park, Poona Lake, *Stone s.n.* (holo: BRI).

Colura saccophylla E.A.Hodgs. & Herzog, Transactions and Proceedings of the Royal Society of New Zealand 77: 253 (1949)

Colura simplicior Jovet-Ast, Cryptogamie - Bryologie Lichenologie 4: 213 (1983)

Original material: Queensland: Atherton Shire, Danbulla state forest, former logging site, *Catcheside 76.65* (holo: PC; iso: JE).

Colura streimannii Pócs, Polish Botanical Journal 60: 7 (2015)

Original material: Queensland: Daintree National Park S of Cape Tribulation, 38 km NNW of Mossman. 'Botanical Circuit' along Noah Creek, 16°08.8′S, 145°26.7′E at 1–2 masl, *Pócs & Streimann 9990/C* (holo: EGR; iso: CANB).

Colurolejeunea (Spruce) Steph., Hedwigia 30: 208 (1891) = **Colura** (Dumort.) Dumort.

Basionym: *Lejeunea* subg. *Colurolejeunea* Spruce

Colurolejeunea was validly published in 1891.

Colurolejeunea acroloba Mont. ex Steph., Hedwigia 29: 97 (1890), *nom. inval.* ≡ **Colura acroloba** (Mont. ex Steph.) Jovet-Ast

Colurolejeunea apiculata Schiffn., Hedwigia 39: 198 (1900) ≡ **Colura apiculata** (Schiffn.) Steph.

Colurolejeunea ari Steph., Hepaticarum species novae IX. Hedwigia 35: 73 (1896) ≡ **Colura ari** (Steph.) Steph.

Original material: Hab. Insula Mindanao. (Micholitz, in folio vivo. Arum sp.).

Colurolejeunea leratii Steph., Revue Bryologique 35: 30 (1908) = **Colura leratii** Steph.

Original material: None cited.

Conoscyphus Mitt., Flora Vitiensis: 404 (1873)

Conoscyphus trapezioides (Sande Lac.) Schiffn., Conspectus Hepaticarum Archipelagi Indici: 125 (1898)

Basionym: *Chiloscyphus trapezioides* Sande Lac.

Corsinia Raddi, Opuscoli Scientifici d'una Società di Professori della Pontifical Università di Bologna 2: 354. 1818.

#Corsinia coriandrina (Spreng.) Lindb., Hepaticol. Utveckl.: 30. (1877)

Basionym: *Riccia coriandrina* Spreng.

Recorded by Berkeley in (1857) as occurring in Western Australia under the name *Corsinia marchantioides*. As far as currently known, because no specimens supporting an Australian occurrence have been located, *Corsinia* does not occur in Australia.

Corsinia marchantioides Raddi, Opuscoli Scientifici 2 (6): 349–361. (1818) = **Corsinia coriandrina** (Spreng.) Lindb.

Cryptochila R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 284 (1963) = **Syzygiella** Spruce

Cryptochila grandiflora (Lindenb. & Gottsche) Grolle, Feddes Repertorium Beiheft 82: 19 (1971) = **Syzygiella sonderi** (Gottsche) Feldberg, Váňa, Hentsche & Heinrichs

Basionym: *Jungermannia grandiflora* Lindenb. & Gottsche

Cryptochila nigrescens (Steph.) Grolle, Feddes Repertorium Beiheft 82: 15 (1971) ≡ **Syzygiella nigrescens** (Steph.) Feldberg, Váňa, Hentsche & Heinrichs

Basionym: *Jamesoniella nigrescens* Steph.

Cryptolophocolea L.Söderstr., Crand.-Stotl., Stotler et Váňa, Phytotaxa 97: 39 (2013)

Cryptolophocolea connatifolia (J.J.Engel) L.Söderstr., Phytotaxa 112: 21 (2013)

Basionym: *Chiloscyphus connatifolius* J.J.Engel

Cryptolophocolea edentata (J.J.Engel) L.Söderstr., Phytotaxa 112: 21 (2013)

Basionym: *Chiloscyphus edentatus* J.J.Engel

Cryptolophocolea helmsiana (Steph.) L.Söderstr., Phytotaxa 112: 19 (2013)

Basionym: *Lophocolea helmsiana* Steph.

Cryptolophocolea leucophylla (Hook.f. & Taylor) L.Söderstr., Phytotaxa 112: 19 (2013)

Basionym: *Jungermannia leucophylla* Hook.f. & Taylor

Cryptolophocolea mitteniana (Colenso) L.Söderstr., Phytotaxa 112: 21 (2013)

Basionym: *Isotachis mitteniana* Colenso

Cryptolophocolea mitteniana var. **obtusa** (J.J.Engel) L.Söderstr., Phytotaxa 112: 21 (2013)

Basionym: *Chiloscyphus mittenianus* var. *obtusus* J.J.Engel

#Cryptolophocolea pallida (Mitt.) L.Söderstr., Phytotaxa 112: 22 (2013)

Basionym: *Lophocolea pallida* Mitt.

Cryptolophocolea pallida is regarded as a New Zealand endemic by Engel and Glenny (2018a), whom we follow here.

#Cryptolophocolea pallidovirens (Hook.f. & Taylor) L.Söderstr., Phytotaxa 112: 20 (2013)

Basionym: *Jungermannia pallidovirens* Hook.f. & Taylor

A southern South American species reported from Tasmania by Rodway (1916) but the presence in Australia is not supported by any located voucher material. We therefore exclude this species from Australia.

Cryptolophocolea subopposita (J.J.Engel) L.Söderstr., Phytotaxa 112: 23 (2013)

Basionym: *Chiloscyphus subopposita* J.J.Engel

Cryptolophocolea trialata (Gottsche) L.Söderstr., Phytotaxa 112: 23 (2013)

Basionym: *Lophocolea trialata* Gottsche

Cryptoplagiochila S.D.F.Patzak, M.A.M.Renner & Heinrichs, Organisms Diversity and Evolution 16: 492 (2016)

Cryptoplagiochila radiculosa (Mitt.) S.D.F.Patzak, M.A.M.Renner & Heinrichs, Organisms Diversity and Evolution 16: 492 (2016)

Basionym: *Plagiochila radiculosa* Mitt.

Cumulolejeunea R.L.Zhu & L.Shu, The Bryologist 112: 162 (2018)

Cumulolejeunea ocellata (Herzog) R.L.Zhu & L.Shu, The Bryologist 112: 162 (2018)

Basionym: *Rectolejeunea ocellata* Herzog

Cuspidatula Steph., Bulletin de l'Herbier Boissier Series 2 1: 1141 (1901)

Cuspidatula monodon (Taylor ex Lehm.) Steph., Bulletin de l'Herbier Boissier Series 2 1: 1143 (1901)

Basionym: *Jungermannia monodon* Taylor ex Lehm.

Cyanolophocolea (R.M.Schust.) R.M.Schust., Nova Hedwigia 72: 102 (2001) ≡ **Heteroscyphus** Schiffn.

Basionym: *Lophocolea* sect. *Cyanolophocolea* R.M.Schust.

Cyanolophocolea echinella (Lindenb. & Gottsche) R.M.Schust., Nova Hedwigia 72: 102 (2001) ≡ **Heteroscyphus echinellus** (Lindenb. & Gottsche) J.J.Engel & Xiao L.He

Basionym: *Lophocolea echinella* Lindenb. & Gottsche

Cyathodium Kunze ex Lehm., Novarum et Minus Cognitarum Stirpium Pugillus 6: 17 (1834)

Cyathodium cavernarum Kunze ex Lehm., Novarum et Minus Cognitarum Stirpium Pugillus 6: 18 (1834)

Original material: Habitat in cavernis subterraneis omni solis luce destitutis montis calcarei versus meridiem a Caobas insulae Cubae fissuris saxorum humidis adhaerens.

Cylindrocolea R.M.Schust., Bulletin of the National Science Museum, Tokyo, new series 12(3): 666 (1969)

Cylindrocolea kiaeri (Austin) Váňa, Phytotaxa 112(1): 2 (2013)

Basionym: *Jungermannia kiaeri* Austin

Dendroceros Nees, Synopsis Hepaticarum 4: 579 (1846)

Dendroceros australis Steph., Schriften der Naturforschenden Gesellschaft zu Leipzig 35: 17 (1909)

Original material: Hab. Australia. N. S. Wales (Watts.).

Dendroceros crispatus (Hook.) Nees, Synopsis Hepaticarum 4: 579 (1846)

Basionym: *Monoclea crispata* Hook.

Dendroceros difficilis Steph., Species Hepaticarum 5: 1009 (1917)

Original material: Hab. Java.

Dendroceros granulatus Mitt., Flora Vitiensis: 419 (1873)

Original material: Samoa (Powell n. 144).

Dendroceros muelleri Steph., Hepaticae Australiae. Hedwigia 28: 133 (1889)

Original material: Bellenden Ker Range. Sayer 1886.

Dendroceros subtropicus C.J.Wild, Transactions of the Natural History Society of Queensland 1: 49 (1893)

Dendroceros wattsianus Steph., Schriften der Naturforschenden Gesellschaft zu Leipzig 35: 17 (1909)

Original material: Hab. Australia. N. S. Wales (Watts.).

Dendrolejeunea (Spruce) Lacout., Revue Bryologique 35: 104 (1908) = ***Thysananthus*** Lindenb.

Basionym: *Lejeunea* subg. *Dendrolejeunea* Spruce

Dendrolejeunea fruticosa (Lindenb. & Gottsche) Lacout., Revue Bryologique 35: 104 (1908) ≡ **Thysananthus fruticosus** (Lindenb. & Gottsche) Schiffn.

Basionym: *Bryopteris fruticosa* Lindenb. & Gottsche

Dendrolembidium tenax (Grev.) Herzog, Arkiv för Botanik, Andra Serien 1: 499 (1951) ≡ **Kurzia tenax** (Grev.) Grolle

Basionym: *Jungermannia tenax* Grev.

Dendromastigophora R.M.Schust., Memoirs of the New York Botanical Garden 45: 738 (1987)

Dendromastigophora flagellifera (Hook.) R.M.Schust., Memoirs of the New York Botanical Garden 45: 738 (1987)

Basionym: *Jungermannia flagellifera* Hook.

Australian records are based on misidentifications of *Mastigophora diclados*.

Denotarisia Grolle, Feddes Repertorium Beiheft 82: 6 (1971)

Denotarisia linguifolia (De Not.) Grolle, Feddes Repertorium Beiheft 82: 6 (1971)

Basionym: *Plagiochila linguifolia* De Not.

Dinckleria Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 421 (1877)

#Dinckleria fruticella (Hook.f. & Taylor) Heinrichs & J.J.Engel, Cryptogamie, Bryologie 29: 194 (2008)

Basionym: *Jungermannia fruticella* Hook.f. & Taylor

All reports of *Dinckleria fruticella* from Australia, including those from Tasmania and Queensland, are based on misidentifications of other Plagiochilaceae species. *Dinckleria fruticella* is endemic to New Zealand (Renner et al. 2016a).

Dinckleria pleurata (Hook.f. & Taylor) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 421 (1877)

Basionym: *Jungermannia pleurata* Hook.f. & Taylor

Dinckleria singularis (Schiffn.) M.A.M.Renner, Schäf.-Verw. & Heinrichs, Australian Systematic Botany 29: 112 (2016)

Basionym: *Plagiochila singularis* Schiffn.

Diplasiolejeunea (Spruce) Schiffn., Hepaticae. Die Naturlichen Pflanzenfamilien 1(3): 121 (1893)

Basionym: *Lejeunea* subg. *Diplasiolejeunea* Spruce

Diplasiolejeunea cavifolia Steph., Species Hepaticarum 5: 918 (1916)

Original material: Hab. Insula San Thome (Africa occ.).

Diplasiolejeunea plicatiloba (Hook.f. & Taylor) Grolle, Journal of the Hattori Botanical Laboratory 45: 175 (1979)

Basionym: *Jungermannia plicatiloba* Hook.f. & Taylor

Diplophyllum (Dumort.) Dumort., Recueil d'Observations sur les Jungermanniacees: 15 (1835), *nom. cons.*

Basionym: *Jungermannia* sect. *Diplophyllum* Dumort.

Diplophyllum androgynum J.J.Engel & G.L.Merr., Journal of the Hattori Botanical Laboratory 84: 277 (1998)

Original material: Tasmania: Great Western Tiers, vicinity of Devils Gullet Lookout, above Fisher River and W of Lake Mackenzie, 1140 m, *Engel 15915* (holo: F; iso: HO).

Diplophyllum angustifolium J.J.Engel & G.L.Merr., Journal of the Hattori Botanical Laboratory 84: 262 (1998)

Original material: Tasmania: North East Dundas Tramway (abandoned), W of Williamsford and SW of Rosebery, ca. 400 m, *Engel 16508* (holo: F; iso: HO).

Diplophyllum densifolium f. *decurvum* Rodway, Tasmanian Bryophyta 2: 77 (1916) = **Clandarium xiphophyllum** (Grolle) R.M.Schust.

Original material: West Coast.

Diplophyllum dioicum R.M.Schust., Bulletin of the National Science Museum, Tokyo 11: 20 (1968)

Original material: New Zealand: Over partly exposed rock-walls, in crevices, in snow tussock (subalpine) zone, track from Lake Mackenzie to Harris Saddle, ca. 3700-3900 ft., Fiordland Ntl. Park (Schuster 67-386c).

Diplophyllum domesticum (Gottsche) Steph., Hepaticarum species novae V. Hedwigia 33: 6 (1894) ≡ **Diplophyllum obtusifolium** subsp. **domesticum** (Gottsche) Váňa

Basionym: *Jungermannia domestica* Gottsche

Diplophyllum incrassatum J.J.Engel & G.L.Merr., Journal of the Hattori Botanical Laboratory 84: 265 (1998)

Original material: Tasmania: King River, 11.5–12 km by road from Regatta Point and 13.5–14 km by road from Strahan Harbour, sea level, *Engel 14888* (holo: F; iso: HO).

Diplophyllum marionense S.W.Arnell, Svensk Botanisk Tidskrift 47: 415 (1953) = **Diplophyllum obtusifolium** subsp. **domesticum** (Gottsche) Váňa

Original material: Distribution: South Africa Note: MARION ISLAND. leg. R. W. Rand no. 3782 p.p.

Diplophyllum obtusifolium (Hook.) Dumort., Recueil d'Observations sur les Jungermanniacees: 16 (1835)

Basionym: *Jungermannia obtusifolia* Hook.

Diplophyllum obtusifolium subsp. **domesticum** (Gottsche) Váňa, Phytotaxa 76(3): 29 (2013)

Basionym: *Jungermannia domestica* Gottsche

Diplophyllum verrucosum R.M.Schust., Bulletin of the National Science Museum, Tokyo 11: 19 (1968)

Original material: New Zealand. South Island. Fiordland National Park, in tussock-grass zone, between Lake Mackenzie and Harris Saddle, ca 3800 ft. (R.M. Schuster 67-361).

Drepanolejeunea (Spruce) Steph., Primitiae florae costaricensis, vol. 1, fasc. 2. Jardin Botanique de l'État:

Bruxelles, 179 (1892e)

Basionym: *Lejeunea* subg. *Drepanolejeunea* Spruce

Drepanolejeunea aucklandica Steph., Species Hepaticarum 5: 358 (1913)

Original material: Hab. Auckland Island.

Drepanolejeunea dactylophora (Gottsche, Lindenb. & Nees) J.B.Jack & Steph., Hedwigia 31(1): 12 (1892)

Basionym: *Lejeunea dactylophora* Gottsche, Lindenb. & Nees

Drepanolejeunea dentata Steph., Hedwigia 35: 82 (1896) ≡ **Lejeunea stenodentata** M.A.M.Renner & Pócs

Original material: Hab. Amboina, in monte Wawani Hila (Dr. G. Karsten)

Drepanolejeunea filicuspis Steph., Species Hepaticarum 5: 344 (1913) ≡ **Microlejeunea filicuspis** (Steph.) Heinrichs, Schäf.-Verw., Pócs & S.Dong

Original material: Hab. Nova Guinea. Samari.

Drepanolejeunea grossidens Steph., Species Hepaticarum 5: 358 (1913)

Original material: Hab Australia, Norfolk Island.

Drepanolejeunea hampeana Steph., Species Hepaticarum 5: 345 (1913)

Original material: Hab. Java, Amboina.

Drepanolejeunea intermedia Zwickel, Annales Bryologici 6: 119 (1933)

Drepanolejeunea levicornua Steph., Species Hepaticarum 5: 347 (1913)

Original material: Hab. Java.

Drepanolejeunea levicornua var. *longicornua* Herzog, Annales Bryologici 3: 142 (1930) ≡ **Drepanolejeunea longicornua** (Herzog) Mizut.

Drepanolejeunea longicornua (Herzog) Mizut., Journal of the Hattori Botanical Laboratory 68: 368 (1990)

Basionym: *Drepanolejeunea levicornua* var. *longicornua* Herzog

Drepanolejeunea micholitzii Steph., Species Hepaticarum 5: 347 (1913) ≡ **Drepanolejeunea pentadactyla** (Mont.) Steph.

Original material: Hab. Java, Philippinae Insulae, Madagascar.

Drepanolejeunea micholitzii was listed in synonymy of *Drepanolejeunea pentadactyla* by Grolle (1980a). *Drepanolejeunea tenuis* was included as an accepted species by McCarthy (2003) based on the compilatory listing of Queensland flora by Bolin & Henderson (2002). It is possible that Grolle's (1980a) synonymy was overlooked by both sources. We follow the Global checklist (Söderström et al. 2016) and regard *Drepanolejeunea micholitzii* as a synonym of *Drepanolejeunea pentadactyla*, in line with Grolle (1980a).

Drepanolejeunea micholitzii var. *genuina* Herzog, Annales Bryologici 7: 80 (1934), *nom. inval.* ≡ **Drepanolejeunea pentadactyla** (Mont.) Steph.

Drepanolejeunea obliqua Steph., Hepaticarum species novae IX. Hedwigia 35: 82 (1896)

Original material: Hab. Java, in Monte Salak. (Teysmann). Cum D. ternatensi comparanda.

Drepanolejeunea pentadactyla (Mont.) Steph., Species Hepaticarum 5: 357 (1913)

Basionym: *Lejeunea pentadactyla* Mont.

Drepanolejeunea serraticalyx Herzog, Annales Bryologici 9: 126 (1936)

Drepanolejeunea tenera K.I.Goebel, Annales de Jardin Botanique de Buitenzorg 39: 20 (1928)

Drepanolejeunea tenuis (Nees) J.B.Jack & Steph., Hedwigia 31(1): 12 (1892)

Basionym: *Jungermannia cucullata* var. *tenuis* Nees

Drepanolejeunea ternatensis (Gottsche) Steph. ex Schiffn., Hepaticae. Die Naturlichen Pflanzenfamilien 1(3): 126 (1893)

Basionym: *Lejeunea ternatensis* Gottsche

Drepanolejeunea ternatensis var. **lancispina** Herzog, Annales Bryologici 12: 119. 1939.

Original material: Java. J. occ. Gede, 1420–2650 m (Verdoorn), Tjiburrum (Schiffner, n. 2639, ex p.), J. centr.: G. Lawoe, 1400–2200 m (Herb. H. B. Bog., n. 1512, 1539, Verdoorn); J. or.: G. Kawi, 800–2200 m, 800–2200 m (Herb. H. B. Bog., n. 1051, 1079, Verdoorn).

Drepanolejeunea tricornua Herzog, Annales Bryologici 9: 124 (1936)

Drepanolejeunea vesiculosa (Mitt.) Steph., Species Hepaticarum 5: 356 (1913)

Basionym: *Lejeunea vesiculosa* Mitt.

Drucella E.A.Hodgs., Transactions of the Royal Society of New Zealand. Botany 2(3): 45 (1962)

Drucella integristipula (Steph.) E.A.Hodgs., Transactions of the Royal Society of New Zealand. Botany 2(3): 45 (1962)

Basionym: *Lepidozia integristipula* Steph.

Dumortiera Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12(1): 410 (1824)

Dumortiera hirsuta (Schwägr.) Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12(1): 410 (1824)

Basionym: *Marchantia hirsuta* Schwägr.

Enigmella G.A.M.Scott & K.G.Beckm., Journal of Bryology 17: 297 (1992)

Enigmella thallina G.A.M.Scott & K.G.Beckm., Journal of Bryology 17: 297 (1992)

Original material: Victoria: Olinda State Forest (sylvan [Silvan]. Fire Track, 15, 22 Oct. 1988, *K. Beckmann s.n.* (holo: MUCV 7889).

Eoisotachis R.M.Schust., Nova Hedwigia 8: 285 (1964)

Eoisotachis nigella (Herzog) R.M.Schust., Nova Hedwigia 15: 452 (1968)

Basionym: *Isotachis nigella* Herzog

Eotrichocolea R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 252 (1963)

Eotrichocolea polyacantha (Hook.f. & Taylor) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 252 (1963)

Basionym: *Jungermannia polyacantha* Hook.f. & Taylor

Eulejeunea Steph., Hedwigia 27 (2): 60 (1888) = **Lejeunea** Lib.

Eulejeunea armitii Steph., Hedwigia 28: 169 (1889) ≡ **Lejeunea armitii** (Steph.) Steph.

Original material: Hab. Nova Guinea. South - East Coast. leg. Capt. Armit. 1883.

Eulejeunea cuspidistipula Steph., Hedwigia 35: 88 (1896) ≡ **Lejeunea cuspidistipula** (Steph.) Steph.

Original material: Hab. Queensland (F.M. Bailey 819)

Eulejeunea denticalyx Steph., Hedwigia 28(3): 169 (1889) ≡ **Lejeunea denticalyx** (Steph.) Steph.

Original material: Hab. Norfolk Island leg Isaac Robinson.

Eulejeunea drummondii (Taylor) Steph., Hedwigia 28(3): 170 (1889) ≡ **Lejeunea drummondii** Taylor

Basionym: *Lejeunea drummondii* Taylor

Eulejeunea helmsiana Steph., Hedwigia 35(3): 89 (1896) ≡ **Lejeunea helmsiana** (Steph.) Steph.

Original material: Hab. Nova Zelandia, Northern Island (Colenso) Southern Island (Helms).

Eulejeunea tumida f. *parvilobula* Rodway, Tasmanian Bryophyta 2: 89 (1916) ≡ **Lejeunea drummondii** Taylor

Euosmolejeunea baileyana Steph., Hedwigia 35: 95 (1896) = **Cheilolejeunea trifaria** (Reinw., Blume & Nees) Mizut.

Original material: Hab. Australia, Queensland (Bailey 673). Involucro femineo facile distinguenda.

Fimbraria australis Hook.f. & Taylor, London Journal of Botany 3: 573 (1844) ≡ **Asterella australis** (Hook.f. & Taylor) Verd. ex G.A.M.Scott & J.A.Bradshaw

Original material: Hab. New Zealand, Mr Colenso.

Fimbraria caucasica Steph., Bulletin de l'Herbier Boissier Series 2 7: 206 (1899) = **Asterella whiteleggeana** (Steph.) R.M.Schust.

Original material: Hab. Caucasus (Moyston).

Fimbraria conocephala Steph., Species Hepaticarum 1: 131 (1900) ≡ **Asterella conocephala** (Steph.) R.M.Schust.

Original material: Hab. Australia Geographe Bay (Berthoud), Marrego River (Bauerlen), Grampians (Sullivan), Rockhampton (Ferd. v. Miiller), Tasmania (Fitzgerald).

Fimbraria dioica Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 104 (1914) ≡ **Asterella dioica** (Steph.) H.A.Mill.

Original material: Hab. Australia, N.S. Wales (near Gladesville): Watts 1095.

Fimbraria drummondii Taylor, London Journal of Botany 5: 412 (1846) ≡ **Asterella drummondii** (Taylor) R.M.Schust. ex D.G.Long

Original material: Hab. Swan River. Mr. James Drummond. Van Diemen's Land. Gunn, Hook. Herb.

Fimbraria elegans Spreng., Systema Vegetabilium, editio decima sexta 4(1): 235 (1827) ≡ **Asterella elegans** (Spreng.) Trevis.

Fimbraria longebarbata Steph., Hedwigia 28: 156 (1889) = **Asterella longebarbata** (Steph.) H.A.Mill.

Original material: Hab. Brisbane River, Amalie Dietrich. 1865. No. 808. Herb. Jack. — Queensland. F. M, Bailey. Herb. Brotherus No. 7. — Queensland, Crocodile Creek, Edwin Bowman, 1887.

Fimbraria muelleri Gottsche ex Steph., Bulletin de l'Herbier Boissier 7: 203 (1899) ≡ **Asterella muelleri** (Gottsche ex Steph.) R.M.Schust.

Original material: Hab. Australia Lindos Valley (F von Muller).

Fimbraria setisquama Steph., Hedwigia 28: 156 (1889) ≡ **Asterella setisquama** (Steph.) R.M.Schust.

Original material: Hab. Hume River, leg. Miss Campbell. ex Herb. Dr. Karl Muller, Halensis.

Fimbraria subplana Steph., Hedwigia 33: 8 (1894) ≡ **Asterella subplana** (Steph.) R.M.Schust.

Original material: Hab. Australia. Arco-eillinna Well. leg. R Helms. Elder Exploring Expedition.

Fimbraria tasmanica Steph., Bulletin de l'Herbier Boissier Series 2 7: 206 (1899) ≡ **Asterella tasmanica** (Steph.) R.M.Schust.

Original material: Hab. Tasmania (Weymouth).

Fimbraria tenella (L.) Nees, Horae Physicae Berolinensis: 45 (1820) ≡ **Asterella tenella** (L.) P.Beauv.

Basionym: *Marchantia tenella* L.

Fimbraria tenella var. *porphyrocephala* Bisch., Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 17: 1023 (1835) = **Asterella tenella** (L.) P.Beauv.

Fimbraria tenera Mitt., Flora Novae-Zelandiae 2(7): 170 (1855) ≡ **Asterella tenera** (Mitt.) R.M.Schust.

Original material: Hab. Northern Island: clay banks, Pahawa and Patea, Colenso.

Fimbraria tenerrima Steph., Species Hepaticarum 6: 17 (1917) ≡ **Asterella tenerrima** (Steph.) H.A.Mill.

Original material: Hab. New-South Wales (Watts legit).

Fimbraria whiteleggeana Steph., Hepaticae Australiae. Hedwigia 28: 155 (1889) ≡ **Asterella whiteleggeana** (Steph.) R.M.Schust.

Original material: Hab. N. S. Wales, Burn's Bay, Lane Cove, leg. Whitelegge. — Queensland, leg. F. M. Bailey Herb. Brotherus No. 33.

Folioceros D.C.Bhardwaj, Geophytology 1: 9 (1971)

Folioceros fuciformis (Mont.) D.C.Bhardwaj, Geophytology 5: 227 (1975)

Basionym: *Anthoceros fuciformis* Mont.

Folioceros glandulosus (Lehm. & Lindenb.) D.C.Bhardwaj, Geophytology 2: 72 (1972)

Basionym: *Anthoceros glandulosus* Lehm. & Lindenb.

Fossombronia Raddi, Jungermanniografa Etrusca: 29 (1818)

Fossombronia alata G.A.M.Scott & D.C.Pike, Journal of the Hattori Botanical Laboratory 56: 340 (1984)

Original material: Victoria: Lilly Pilly Gully, Wilsons Promontory, 2 Nov. 1980, *D.C. Cargill & C.J. Moore* (MELU MUCV 4278).

Fossombronia altilamellosa G.A.M.Scott & D.C.Pike, Journal of the Hattori Botanical Laboratory 62: 367 (1987), *nom. inval.* = **Fossombronia altilamellosa** G.A.M.Scott & D.C.Pike ex Cargill

Fossombronia altilamellosa G.A.M.Scott & D.C.Pike ex Cargill, Catalogue of Australian Liverworts and Hornworts: 114 (2003)

Original material: Victoria: Toolangi-Kinglake Road, Oct. 1985, *B.A. Fuhrer, D.C. Pike, G.A.M. Scott* (lecto: MELU MUCV 6550).

#Fossombronia angulosa (Dicks.) Raddi, Jungermanniografia Etrusca: 29. Modena. (1818)

Basionym: *Jungermannia angulosa* Dicks.

Fossombronia angulosa was recorded for Australia by Gottsche in Mueller's Fragmenta Phytographiae Australiae, and based on his description, the specimens are probably the endemic species *Fossombronia wattsii* which has similar spores. Though *F. angulosa* and *F. wattsii* have similar spores, we have never seen plants or spores matching *F. angulosa* in Australia. It is most probably that Gottsche misapplied the name *F. angulosa* to a plant undescribed at the time, which Stephani subsequently described as *F. wattsii*. Scott & Bradshaw recorded *Fossombronia angulosa* from Australia based on Gottsche. *Fossombronia angulosa* is a European species with a complex nomenclatural and typification history, see Stotler et al. (2005). We conclude that *Fossombronia angulosa* does not occur in Australia.

Fossombronia areolata G.A.M.Scott & D.C.Pike, Catalogue of Australian Liverworts and Hornworts: 114 (2003)

Original material: Victoria: Lodge Rd, Grampians, 16 Sep. 1981, *D.C. Pike & A.E. Pike* (MELU MUCV 4628).

Fossombronia auricolor G.A.M.Scott & D.C.Pike, *nom. inval.* = **Fossombronia auricolor** G.A.M.Scott & D.C.Pike ex Cargill

Fossombronia auricolor G.A.M.Scott & D.C.Pike ex Cargill, Catalogue of Australian Liverworts and Hornworts: 114 (2003)

Original material: South Australia: Wilpena Pound, 27 Aug. 1984, *B.A. Fuhrer, D.C. Pike, G.A.M. Scott* (MELU MUCV5435).

Fossombronia australis Mitt., Journal of the Linnean Society, Botany 15: 73 (1876)

Original material: Type: Heard Island. Challenger Expd. Feb 1874 H.N.Mosely (lectotype NY 02565018).

Fossombronia bracchia Cargill Acta Biologica Plantarum Agriensis 11(1): 270, 2–8 (2023)

Original material: Western Australia: Lesueur National Park, Banovich Rd, 5 Aug. 2022, *D.C. Cargill, J. Milne, H. Innes & K. Syme 1813A* (holo: CANB 954795).

Fossombronia caespitiformis De Not. ex Rabenh., Hepaticae Europaeae Decas 12, 14: No. 123 (1860)

Fossombronia cerebriformis G.A.M.Scott & D.C.Pike, Journal of the Hattori Botanical Laboratory 56: 343 (1984)

Fossombronia cultriformis G.A.M.Scott & D.C.Pike, Journal of the Hattori Botanical Laboratory 62: 371 (1987)

Original material: South Australia: 1 km from Cooke's Plain turn-off near Meningee, The Coorong, 8 Sep. 1985, *D.C.Pike & B.A.Fuhrer* (MELU MUCV 6310).

Fossombronia densa G.A.M.Scott & D.C.Pike, Journal of the Hattori Botanical Laboratory 62: 372 (1987)

Original material: Victoria: State Forest, Rushworth, 5 Sep. 1974, *B.A.Fuhrer* (MELU MUCV 2455).

Fossombronia dentata Steph., Memoires de l'Herbier Boissier 16: 40 (1900)

Fossombronia forsythii Steph., Species Hepaticarum 6: 72 (1917) = **Fossombronia wondraczekii** (Corda) Dumort. ex Lindb.

Fossombronia fuhreri G.A.M.Scott & D.C.Pike, Journal of the Hattori Botanical Laboratory 62: 374 (1987)

Original material: Victoria: Point Danger, Portland, 10 Sep. 1984, *B.A. Fuhrer & D.C. Pike* (MELU MUCV 5729).

Fossombronia grossepapillata Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 105 (1914)

Original material: Hab. Australia, (Young): Watts, 988.

Fossombronia hewsoniae G.A.M.Scott & D.C.Pike, Journal of the Hattori Botanical Laboratory 62: 375 (1987)

Original material: Western Australia: Dandaragan Road, W of Moora, 22 Aug. 1984, *H. Hewson* (MELU MUCV 5492).

Fossombronia integrifolia Steph., Species Hepaticarum 6: 73 (1917)

Original material: Hab. Australia. (Watts legit).

Fossombronia intestinalis Taylor, London Journal of Botany 5: 408 (1846)

Original material: Hab. Swan River. Mr James Drummond.

Fossombronia laciniata G.A.M.Scott & D.C.Pike, Journal of the Hattori Botanical Laboratory 62: 375 (1987)

Original material: South Australia: On coarse sand at roadside through remnant mallee woodland, 1 km east of Salt Creek, The Coorong, *B.A. Fuhrer, D.C. Pike & G.A.M. Scott* (MELU MUCV 5402).

#Fossombronia leucoxantha (Lehm.) Lehm. & Lindenb., Synopsis hepaticarum. 4: 469 (1846)

Basionym: *Jungermannia leucoxantha* Lehm.

Rejected from Australia by Scott & Bradshaw (1985), and here. No Australian specimens match the South African species *Fossombronia leucoxantha*. The dentate leaves and spore pattern of that species does not match any Australian species.

#Fossombronia longiseta (Austin) Austin, Hepaticae Boreali-Americanae: 30 (1873)

Basionym: *Androcryphia longiseta* Austin

Schuster (1992) synonymised the Australian endemic *Fossombronia vermiculata* under the North American species *F. longiseta*, however, a comparison of the spores of both species show that they are not the same species. *Fossombronia longiseta* does not occur in Australia.

Fossombronia magnaspora G.A.M.Scott & D.C.Pike ex Cargill, Catalogue of Australian Liverworts and Hornworts: 114 (2003)

Original material: Victoria: Lodge Road, near Forest Lodge, Grampians, 16 Oct. 1981, *D.C. & A.E. Pike* (MELU MUCV 4626).

Fossombronia magnaspora G.A.M.Scott & D.C.Pike, Journal of the Hattori Botanical Laboratory 62: 367 (1987), *nom. inval.* = **Fossombronia magnaspora** G.A.M.Scott & D.C.Pike ex Cargill

Fossombronia maritima (Paton) Paton, Journal of Bryology 18: 367 (1994)

Basionym: *Fossombronia pusilla* var. *maritima* Paton

No published records for *F. maritima* or its basionym are known for Australia, and it is here excluded.

Fossombronia maritima G.A.M.Scott & D.C.Pike, Flora of Australia Supplementary Series 21: 114 (2003), *nom. inval.* = **Fossombronia ruminata** Cargill

Fossombronia microlamellata G.A.M.Scott & D.C.Pike, Journal of the Hattori Botanical Laboratory 56: 347 (1984)

Original material: Victoria: Courtney's Road, South Belgrave, 13 Sep. 1982, *D.C. Pike & B.A. Fuhrer* (MELU MUCV 4926).

Fossombronia naumannii Schiffn., Die Forschungsreise S.M.S. "Gazelle" in den Jahren 1874 bis 1876... (Botanik): 39 (1890) = **Fossombronia australis** Mitt.

Original material: Ins. Kerguelen, Successful Harbour, in rupibus humidis (12. 74). 3" et c. fr. evol.

Fossombronia papillata Steph., Hepaticae Australiae. Hedwigia 28: 157 (1889)

Original material: Queensland. C. Wild. — Bailey. — Herb. Brotherus.

Fossombronia perpusilla (Colenso) Steph., Species Hepaticarum 1: 379 (1900) = **Fossombronia pusilla** (L.) Nees

Basionym: *Noteroclada perpusilla* Colenso

Fossombronia pseudointestinalis Cargill, Arctoa 30: 177–185. (2021)

Original material: New South Wales: Bendick Murrell National Park, NNE of Young, 19 Jul. 2020, *R.W. Purdie & M.A. Fagg 12052* (holo: CANB 918520; iso: NSW).

Fossombronia punctata G.A.M.Scott & D.C.Pike, Journal of the Hattori Botanical Laboratory 56: 341 (1984)

Original material: Victoria: Wyperfeld National Park, Aug. 1974, *G.A.M. Scott* (MELU MUCV 2485).

Fossombronia purpureospora G.A.M.Scott & D.C.Pike, *nom. inval.* = **Fossombronia purpureospora** G.A.M.Scott & D.C.Pike ex Cargill

Fossombronia purpureospora G.A.M.Scott & D.C.Pike ex Cargill, Catalogue of Australian Liverworts and Hornworts: 114 (2003)

Original material: South Australia: Wilpena Pound, 26 Aug. 1984, *B.A. Fuhrer, D.C. Pike & G.A.M. Scott* (MELU MUCV 5431).

Fossombronia pusilla (L.) Nees, Naturgeschichte der Europaischen Lebermoose 3: 319 (1838)

Basionym: *Jungermannia pusilla* L.

Fossombronia pusilla var. *maritima* Paton, Journal of Bryology 7: 244 (1973) = **Fossombronia maritima** (Paton) Paton

Original material: Jersey: Channel Islands, St. Brelade, peaty soil on cliff top W. of Noirmont Point, Mar. 1969, *J.A.Paton s.n.* (BM).

No published records of this variety are known for Australia, and it is here excluded.

Fossombronia rudis G.A.M.Scott & D.C.Pike, Beihefte zur Nova Hedwigia 90: 110 (1987) *nom. inval.*

This name is invalid as no type was designated, only syntypes.

Fossombronia ruminata Cargill, Phytotaxa 65: 45 (2012)

Replaced synonym: Fossombronia maritima G.A.M.Scott & D.C.Pike

Fossombronia rupestris G.A.M.Scott & D.C.Pike ex Cargill, Catalogue of Australian Liverworts and Hornworts: 114 (2003)

Original material: South Australia: Wilpena Pound, 26 Aug 1984, *B. Fuhrer, D.C. Pike & G.A.M. Scott MUCV 5447* (lecto: MELU).

Fossombronia rupestris G.A.M.Scott & D.C.Pike, Journal of the Hattori Botanical Laboratory 62: 381 (1987), *nom. inval.* = **Fossombronia rupestris** G.A.M.Scott & D.C.Pike ex Cargill

Fossombronia scrobiculata G.A.M.Scott & D.C.Pike, Journal of the Hattori Botanical Laboratory 56: 341 (1984)

Original material: Victoria: Rushworth, 25 Jul. 1973, *B.A. Fuhrer MUCV 2195* (holo: MELU).

Fossombronia subsaccata Steph. Species Hepaticarum 6: 75 (1917)

Original material: Hab. Australia (Lesquereux legit.).

Fossombronia tesselata G.A.M.Scott & D.C.Pike, Journal of the Hattori Botanical Laboratory 62: 382 (1987)

Original material: Victoria: Grampians, Victoria Valley Road, near Sierra Road junction, 31 Aug. 1985, *B.A. Fuhrer & D.C. Pike MUCV 6402* (holo: MELU).

Fossombronia truncata G.A.M.Scott & D.C.Pike, *nom. inval.* = **Fossombronia truncata** G.A.M.Scott & D.C.Pike ex Cargill

Fossombronia truncata G.A.M.Scott & D.C.Pike ex Cargill, Catalogue of Australian Liverworts and Hornworts: 114 (2003)

Original material: Victoria: Warrandyte, Jumping Creek National Park, 16 Sep. 1982. *B. Fuhrer & D.C. Pike MUCV 4918* (holo: MELU).

Fossombronia vermiculata G.A.M.Scott & D.C.Pike, Journal of the Hattori Botanical Laboratory 56: 345 (1984)

Original material: Victoria: Bealiba, W. of Bendigo, 28 Jul. 1971, *G.A.M. Scott MUCV 4263* (holo: MELU).

Fossombronia wattsii Steph., Species Hepaticarum 6: 75 (1917)

Original material: Hab. Australia. New-South Wales. (Watts legit.).

Fossombronia wondraczekii (Corda) Dumort. ex Lindb., Helsingfors Dagblad 273: 2 (1873)

Basionym: *Jungermannia wondraczekii* Corda

Frullania Raddi, Jungermanniografa Etrusca: 9 (1818)

Frullania allanii E.A.Hodgs., Transactions and Proceedings of the Royal Society of New Zealand 77: 371 (1949)

Original material: On bark in bush remnant, "Rotonui", Wairoa, June, 1931; 3 gathering from bark in bush remnant, Kiwi Station, Feb., 1934, April, 1934, Easter, 1943; bush at Maugapoike Falls, Wairoa, Dec. 1931, E.A. Hodgson; tree-trunk in coastal forest, Terawhiti Hill, Nov., 1946, A.P. Druce.

Frullania alternans Nees Synopsis Hepaticarum 430 (1845)

Original material: Habitat in Insula Norfolk.

Frullania apiculata (Reinw., Blume & Nees) Dumort., Recueil d'Observations sur les Jungermanniacees: 13 (1835)

Basionym: *Jungermannia apiculata* Reinw., Blume & Nees

Frullania apiculata var. *parva* S.Hatt., Cryptogamie - Bryologie Lichenologie 50: 177 (1984) = **Frullania apiculata** (Reinw., Blume & Nees) Dumort.

Original material: Queensland: Devil's Thumb, W of Mossman, 9 Oct. 1982, *M.L. Hicks 11287* (c. per.) (holo: NICH; iso: hb M.L.Hicks).

Hattori is inconsistent in his treatment of this taxon, synonymising it with *Frullania apiculata* in Hattori (1987), but continuing its recognition and use for Australian plants in Hattori (1988). We treat this variety as synonymous with *F. apiculata* following Hattori (1987), pending further investigation.

Frullania asperifolia Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 105 (1914) = **Frullania falciloba** Taylor ex Lehm.

Original material: Hab. Australia, (Yarrangobilly Caves and Mount Wilson): Watts, 1093, etc.

Frullania aterrima (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 3: 450 (1845)

Basionym: *Jungermannia aterrima* Hook.f. & Taylor

Frullania australis Steph., Species Hepaticarum 4: 659 (1911) = **Frullania hypoleuca** Nees

Original material: Hab. Australia orientalis, New South Wales.

Frullania baileyana Steph., Species Hepaticarum 4: 417 (1910)

Original material: Hab. Australia, Queensland.

Frullania ballinensis Steph., Species Hepaticarum 4: 559 (1911) = **Frullania serrata** Gottsche

Original material: Hab. Australia orientalis. New South Wales.

Frullania belmorensis Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 106 (1914)

Original material: Hab. Australia (Belmore Falls): Watts 931.

Frullania binominata Steph., Species Hepaticarum 6: 545 (1924) = **Frullania falciloba** Taylor ex Lehm.

Frullania brachyclada Taylor ex Lehm., Novarum et Minus Cognitarum Stirpium Pugillus 8: 21 (1844) ≡ **Lepidolaena brachyclada** (Taylor ex Lehm.) Trevis.

Original material: Habitat in Terra van Diemen (Rob. Neill), in Nova Hollandia (Fraser), et in Insula van Diemen (Dr. Spence).

We accept the authorship of this name as Taylor ex Lehm. because Lehmann cites '*Jungermannia brachyclada* Taylor ms' after the diagnosis, and Taylor's *Jungermannia* encompassed all leafy liverworts.

Frullania cataractarum Steph., Species Hepaticarum 4: 657 (1911)

Original material: Hab. Australia, New South Wales.

Frullania cinnamomea Carrington & Pearson, Proceedings of the Linnean Society of New South Wales, Series 2 2: 1035 (1888) = **Frullania clavata** (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

Original material: none cited.

Accepted by Hattori (1979a) as distinct, but as a synonym of *Frullania clavata* by Hattori (1983).

Frullania clavata (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 3: 428 (1845)

Basionym: *Jungermannia clavata* Hook.f. & Taylor

Frullania cranialis (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 3: 419 (1845) = **Frullania dilatata** (L.) Dumort.

Basionym: *Jungermannia cranialis* Hook.f. & Taylor

Frullania crassitexta Steph., Species Hepaticarum 4: 423 (1910)

Original material: Hab. Australia orientalis. Queensland.

Frullania crawfordii Steph., Hepaticarum species novae VI. Hedwigia 33: 143 (1894)

Original material: Hab. N. S. Wales. Maclay River, leg. Crawford, com. Baron Ferd. von Miiller. Melbourne.

Frullania crispata Steph., Species Hepaticarum 4: 355 (1910)

Original material: Hab. Insula Norfolk (Australia).

Frullania deplanata Mitt., Flora Novae-Zelandiae 2(7): 161 (1855)

Frullania dietrichiana Steph., Species Hepaticarum 4: 423 (1910) = **Frullania seriata** Gottsche ex Steph.

Original material: Hab. Australia, Queensland.

Published as '*dietrichana*', a correctible error (Art. 60.8(d)).

Frullania difficilis Steph., Species Hepaticarum 4: 425 (1910) = **Frullania seriata** Gottsche ex Steph.

Original material: Hab. Australia, New South Wales.

Hattori (1988) treated this species as distinct.

#Frullania dilatata (L.) Dumort., Recueil d'Observations sur les Jungermanniacées 13 (1835)

Basionym: *Jungermannia dilatata* L.

Frullania dilitata was excluded from Australia by Hattori (1983), an exclusion we maintain here.

Frullania diplota Taylor, New Hepaticae. London Journal of Botany 5: 405 (1846) = **Frullania rostrata** (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees

Original material: Hab. On Parmelia sulcata, Tayl. Interior of New South Wales. R. Cunningham, 1836. Hewett Watson, Esq.

Frullania elongata Steph., Species Hepaticarum 4: 423 (1910) ≡ **Frullania rubella** var. **elongata** (Steph.) S.Hatt.

Original material: Hab. Australia orientalis.

Frullania engelii S.Hatt., Journal of the Hattori Botanical Laboratory 54: 143 (1983) = **Frullania setchellii** Pearson

Original material: Tasmania: Florentine River, near Gordon River Road, 1 km W of junction with Scotts Peak Road, E of S end of Lake Gordon, 380 m, 42°49′S, 146°22′E, 5 Mar. 1977, *J.J. Engel 15080* (holo: NICH; iso: F).

Frullania ericoides (Nees) Mont., Annales des Sciences Naturelles; Botanique 12: 51 (1839)

Basionym: *Jungermannia ericoides* Nees

Frullania excisula Steph., Journal and Proceedings of the Royal Society of New South Wales 48(1–2): 107 (1914) = **Frullania falciloba** Taylor ex Lehm.

Original material: Hab. Australia, N.S. Wales (Mount Wilson and Blackheath); Watts, 1030, 1071.

Frullania exigua Steph., Species Hepaticarum 4: 367 (1910)

Original material: Hab. Africa, Congo.

We have been unable to confirm the presence of this African species in Australia. *Frullania exigua* was listed as a synonym of *Frullania obscurifolia* by Demaret & Vanden Berghen (1947).

Frullania falciloba Taylor ex Lehm., Novarum et Minus Cognitarum Stirpium Pugillus 8: 20 (1844)

Original material: Habitat in Terra van Diemen; (Herb. Tayl. et Greville.)

Frullania falsa Steph., Species Hepaticarum 4: 413 (1910) = **Frullania probosciphora** Taylor

Original material: Hab. Tasmania.

Frullania ferdinandi-muelleri Steph., Species Hepaticarum 4: 417 (1910)

Original material: Hab. Australia, New South Wales.

Frullania filipendula Steph., Species Hepaticarum 4: 419 (1910) = **Frullania rubella** var. **rubella**

Original material: Hab. Australia, Queensland, New South Wales.

Frullania fissistipula Steph., Hepaticarum species novae VI. Hedwigia 33: 162 (1894) ≡ **Lepidolaena fissistipula** (Steph.) Grolle

Original material: Hab. Australia, Bellenden Ker Range, leg. Sayer 1887.

Frullania flexuosa S.Hatt., Journal of the Hattori Botanical Laboratory 54: 146 (1983)

Original material: Queensland: Rockhampton, coll. & dat. ign. (Herb. Lugd. Bat. 40. Austral. No. 939.28 98) (holo: L; iso: NICH).

Frullania forsythiana Steph., Species Hepaticarum 4: 419 (1910) = **Frullania falciloba** Taylor ex Lehm.

Original material: Hab. Australia, Queensland, New South Wales.

Frullania fugax (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 3: 445 (1845)

Basionym: *Jungermannia fugax* Hook.f. & Taylor

Frullania fulfordiae S.Hatt., The Bryologist 90: 365-370 (1987)

Original material: Lord Howe Island: North end of island, along trail from old settlement to North Bay, and onward to Old Gulch, 15 Nov. 1981, *D.H. Vitt 28318* (holo: NICH; iso: ALTA).

#Frullania gaudichaudii (Nees & Mont.) Nees & Mont. ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 3: 435 (1845)

Basionym: *Jubula gaudichaudii* Nees & Mont.

Hattori (1982) gave a wide distribution for *Frullania gaudichaudii*, including New Guinea, Guadalcanal, tropical Asia, Pacific Isls; and 'Australia (?)'. We interpret Hattori's use of the question mark in this instance as indication of his expectation, given the wide range of this species, of an Australian occurrence, rather than the observation of such. As no specimens of *Frullania gaudichaudii* are known from Australia, we formally exclude this species here.

Frullania gracillima Steph., Species Hepaticarum 4: 437 (1910)

Original material: Hab. India orientalis (leg. Kurz).

No specimens supporting Australian occurrence of *Frullania gracillima* have been located. *Frullania gracillima* was listed by McCarthy (2003) as occurring in New South Wales, but no literary sources, or specimens, supporting this distribution were provided. The taxonomic status and Australian occurrences of this species both require further investigation.

Frullania grayana Steph., Species Hepaticarum 6: 539 (1922), *nom. illeg.* = **Frullania deplanata** Mitt.

Original material: Hab. Nova Zelandia (Gray legit).

Frullania grossiloba Steph., Species Hepaticarum 4: 424 (1910) = **Frullania monocera** var. **monocera**

Original material: Hab. Tasmania.

Frullania hamaticoma Steph., Hedwigia 28: 158 (1889)

Original material: Hab. Upper Ovens River, Victoria, Mrs Mc. Cann. 1882 in Herb. Dr. Karl Muller; Halensis.

Frullania hampeana Nees, Synopsis Hepaticarum 3: 426 (1845) = **Frullania monocera** var. **depauperata** S.Hatt.

Original material: In Nova Hollandia (Hb. Hp.).

Frullania hasskarliana var. *queenslandica* S.Hatt., Cryptogamie - Bryologie Lichenologie 5: 180 (1984) = **Frullania johnsonii** Steph.

Original material: Queensland: Devils Thumb, W of Mossman, 1150 m, over rock outcrop, 9 Oct. 1982, *M.L. Hicks 11258* (holo: NICH; iso: hb M.L. Hicks).

Frullania hattorii Konrat & Braggins, New Zealand Journal of Botany 41: 56 (2003)

Original material: Tasmania: Hartz Mountains National Park, Lake Osborne Track, c. 900 m, c. 43°14′S, 46°44′E, 14 Feb. 1998, *J.E. Braggins 98012* (holo: HO 553496; iso: AK, F).

Frullania hicksiae S.Hatt., Cryptogamie - Bryologie Lichenologie 50: 182 (1984)

Original material: Queensland: Mt Lewis, SW of Mossman, 1100 m, bark of tree in rain forest, 29 Aug. 1982, *M.L. Hicks 11115* (holo: NICH; iso: hb M.L. Hicks).

Frullania hicksiae f. **litoralis** S.Hatt., Beihefte zur Nova Hedwigia 90: 149 (1988)

Original material: Queensland: Cook District: Etty Bay, adjacent to Etty Bay Caravan Park, 17°34′S, 146°E, coastal rainforest area, on bark of tree subject to salt spray at high tide, 9 Jul. 1984, *B. Thiers & R.E. Halling 2381* (holo: NICH; iso: AD, NY).

Frullania howeana Steph., Journal and Proceedings of the Royal Society of New South Wales 48(1–2): 107 (1914)

Original material: Hab. Lord Howe Island, (Watts, 62)

Frullania hypoleuca Nees, Novorum Actorum Academiae Caesareae Leopoldinae-Carolinae Naturae Curiosorum 19, Suppl. 1: 470 (1843)

Original material: In Oahu insula.

Frullania incumbens Mitt., Flora Novae-Zelandiae 2(7): 162 (1855)

Original material: New Zealand: North Island: bark of Sophora, Wairarapa Valley, *Colenso a. 1253* (lecto: NY; isolecto: WELT).

Frullania johnsonii Steph., Hedwigia 33: 163 (1894)

Original material: Hab. Australia, Bellender Ker Range, leg. Stephen Johnson 1892. comm. Baron F. v. Muller.

Frullania junghuhniana subsp. *wattsii* S.Hatt., Journal of the Hattori Botanical Laboratory 36: 130 (1972) = **Frullania rostrata** (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees

Original material: Australia, tree, Fitzroy falls, Oct. 1908, leg. Rev. W.W. Watts No. 929, in G (15007).

Frullania klotzschii Nees ex Steph., Species Hepaticarum 4: 558 (1911)

Original material: Hab. Nova Hollandia, loco?

Source location of type gathering unknown. *Frullania klotzschii* is a poorly known entity requiring further investigation.

Frullania knightiana Steph., Species Hepaticarum 6: 542 (1924) = **Frullania falciloba** Taylor ex Lehm.

Original material: Hab. Australia: King Island (Spong legit).

Frullania latogaleata Herzog, Transactions of the British Bryological Society 1: 189 (1949)

Original material: Western Australia: Pemberton, on smooth tree trunk in Karri Forest; very marked radial growth, Apr. 1946, *G.G. Smith s.n.* (holo: UWA 79 [?now at PERTH]).

Frullania maccrantica Gottsche, Linnaea 28: 559 (1856) = **Frullania prolosciphora** Taylor

Original material: Lecta in insula Maceraes et in Wilsons Promontory.

Frullania maccreana F.Muell. ex Steph., Species Hepaticarum 4: 355 (1910) = **Frullania prolosciphora** Taylor

Frullania megalocarpa Taylor, London Journal of Botany 5: 404 (1846) = **Frullania rostrata** (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees

Original material: Hab. On Musci. Van Diemen's Land. Dr Greville's herb.

Frullania meyeniana Lindenb., Synopsis Hepaticarum 3: 455 (1845)

Original material: Habitat in Oahu insula (Meyen in Hb. N.).

Frullania minutistipula Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 108 (1914) = **Frullania rostrata** (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees

Original material: Hab. Australia, (Rodriguez Pass): Watts, 1001 b , 1001 c.

Frullania monocera (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 3: 418 (1845)

Basionym: *Jungermannia monocera* Hook.f. & Taylor

Frullania monocera var. **depauperata** S.Hatt., Journal of the Hattori Botanical Laboratory 57: 419 (1984)

Original material: Mont Mou N of Paita, 330-480 m, NK 21519 - holotype in NICH

Frullania monocera var. **subhampeana** (E.A.Hodgs.) Hentschel & von Konrat, Phytotaxa 220: 136 (2015)

Basionym: *Frullania subhampeana* E.A.Hodgs.

Frullania mooreana Steph., Species Hepaticarum 4: 422 (1910) = **Frullania falciloba** Taylor ex Lehm.

Original material: Hab. Tasmania

Frullania multilacera Steph., Species Hepaticarum 4: 650 (1911)

Original material: Hab. Salomon Insulae.

Frullania multilacera subsp. **gracilior** S.Hatt., Memoirs of the New York Botanical Garden 45: 547 (1987)

Original material: Queensland: Helenvale-Rossville road, 29 km S of Cooktown, 15°45′S, 145°15′E, 150 m, Eucalyptus-Casuarina dominated grasslands with boulders, often burnt, on tree trunk, 5 Jul. 1984, *H.Streimann 31004* (holo: NICH; iso: CBG, JE).

Frullania multilaceroides S.Hatt., Memoirs of the New York Botanical Garden 45: 549 (1987)

Original material: Queensland: Palmerston Natl. Park. Loc. 1, opposite ranger's residence, Innisfail, tropical rain forest, epiphytic, 5 Sep. 1985, *G.A.M. Scott s.n.* (holo: NICH 402274; iso: MUCV 7041).

Frullania neosheana S.Hatt., Journal of the Hattori Botanical Laboratory 45: 350 (1979)

Original material: Queensland: Atherton Tablelands, the Crater National Park, 35 km S of Atherton, 1200 m, on rotten log, 25 Jun. 1975, *G. Shea 6936* (holo: NICH; iso: herb. G. Shea).

Frullania nodulosa (Reinw., Blume & Nees) Nees, Synopsis Hepaticarum 3: 433 (1845)

Basionym: *Jungermannia nodulosa* Reinw., Blume & Nees

Frullania nodulosa var. **plana** Schiffn., Die Forschungsreise S.M.S. "Gazelle" in den Jahren 1874 bis 1876... (Botanik): 37 (1890) = **Frullania nodulosa** (Reinw., Blume & Nees) Nees

Frullania pallidula S.Hatt., Beihefte zur Nova Hedwigia 90: 152 (1987)

Original material: Queensland: Lamington Nat. Park, trail to Elebana Falls, 500 m, subtropical rainforest, on bark of tree,

8 Aug. 1981, *B. Thiers 1108* (with *F. subhampeana*) (holo: NICH; iso: NY).

Frullania pauciramea Steph., Species Hepaticarum 4: 458 (1911)

Original material: Hab. Nova Guinea. In monte Dayman

Frullania pentapleura Taylor, London Journal of Botany 5: 402 (1846)

Original material: Hab. Swan River. Mr James Drummond.

Frullania pentapleura subsp. *falsa* (Steph.) S.Hatt., Beihefte zur Nova Hedwigia 90: 153 (1988) = **Frullania probosciphora** Taylor

Basionym: *Frullania falsa* Steph.

Frullania probosciphora Taylor, London Journal of Botany 5: 402 (1846)

Original material: Hab. On bark. Van Diemen's Land. Gunn. 1832.

Frullania pycnantha (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 3: 411 (1845)

Basionym: *Jungermannia pycnantha* Hook.f. & Taylor

Frullania queenslandica Steph., Species Hepaticarum 4: 424 (1910)

Original material: Hab. Australia. Queensland.

Frullania repandistipula Sande Lac., Nederlandsch Kruidkundig Archief 3: 422 (1853)

Original material: None cited.

Frullania repandistipula subsp. **queenslandica** S.Hatt., Memoirs of the New York Botanical Garden 45: 550 (1987)

Original material: Queensland: Big Tableland, 26km S of Cooktown, 4 Jul. 1984; *H. Streimann 30817* (holo: NICH; iso: CBG, JE).

Frullania reptans Mitt., Flora Novae-Zelandiae 2(7): 161 (1855) = **Frullania probosciphora** Taylor

Original material: Hab. Northern Island: bark of Edwardsia, East Coast, Colenso.

Frullania rostellata Mitt., Handbook of the New Zealand Flora 2: 755 (1867)

Original material: Northern Island, on Sticta, leg. Knight.

Frullania rostellata was excluded from Australia by Hattori (1979b).

Frullania rostrata (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 3: 445 (1845)

Basionym: *Jungermannia rostrata* Hook.f. & Taylor

Frullania rubella Gottsche ex Steph., Hedwigia 28: 159 (1889)

Original material: Hab. Queensland, Toowoomba, leg. C. Hartmann.

Frullania rubella var. **elongata** (Steph.) S.Hatt., Journal of the Hattori Botanical Laboratory 54: 166 (1983)

Basionym: *Frullania elongata* Steph.

#Frullania scandens Mont., Annales des Sciences Naturelles; Botanique 19: 258 (1843)

Original material: Hab. ad ramulos , quos scandens circumvolvit, Stictœ Orygmeœ consortem in insulis Auckland detexit cl. Hombron.

Several Australian specimens identified as *Frullania scandens* are held in Australian herbaria. These comprise two subsets, the first collected prior to 1980, and identified by Hattori before 1983, and the second comprising specimens collected after the mid-1980's and identified by others. The first set may be explained by Hattori's early view that *F. deplanata*, a species that does occur in Australia, was synonymous with *F. scandens*, and Hattori did not catch up with these specimens to apply his revised view. The second set may be explained in terms of either simple misidentification of similar species, primarily *F. deplanata* which shares the dorso-ventrally compressed perianth, or identifiers following Hattori's earlier treatment. We follow Hattori's (1983) published view that *F. scandens* is endemic to New Zealand and its subantarctic islands and does not occur in Australia.

Frullania schusteri S.Hatt., Beihefte zur Nova Hedwigia 90: 154 (1987)

Original material: Queensland: Moreton District, Lamington Nat. Park, vicinity of O'Reilly's Guest House, Blue Pools track, 28°14′S, 153°10′E, subtropical rainforest, on bark of tree, 30 July 1984, *B. Thiers & R.E. Halling 2825* (holo: NICH; iso: AD, NY).

Frullania scottiana S.Hatt., Memoirs of the New York Botanical Garden 45: 551 (1987)

Original material: Queensland: Smoko Creek, Kirrima State Forest, Cardwell, tropical rain forest, epiphytic on twigs, 31 Aug 1985, *G.A.M. Scott s.n.* (holo: NICH 402268; iso MUCV 6952).

Frullania seriata Gottsche ex Steph., Hedwigia 28: 160 (1889)

Original material: Queensland, Towoombo by C. Hartmann, Queensland, C. Wild in Herb. Brotherus No. 17. N. S, Wales. Cambewarra. G. A. Thorpe 1884.

Frullania serrata Gottsche, Synopsis Hepaticarum 3: 453 (1845)

Original material: Habitat in Java insula cura Frullania cordistipula (Blume); in Capite Bonae Spei (Hess in Hb. Hp.).

Frullania setchellii Pearson, University of California Publications in Botany 10: 326 (1923)

Original material: Habitat. — Bush, near Waiotapu, North Island, New Zealand ; coll. W. A. Setchell, 1904, no. 159. Type, Herb. Univ. Calif., no. 213713.

Frullania sheana S.Hatt., Journal of the Hattori Botanical Laboratory 45: 356 (1979)

Original material: Queensland: Atherton Tablelands, the Crater National Park, 35 km S of Atherton, 1200 m, on rotten log, 25 June 1975, *G. Shea 6936* (holo: NICH; iso: herb. G. Shea).

Frullania simmondsii Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 109 (1914)

Original material: Hab. Australia, (near Brisbane): Simmonds leg. (Watts, 1110).

Frullania sinskeana J.J.Engel & B.C.Tan, Journal of the Hattori Botanical Laboratory 60: 335 (1986)

Replaced synonym: *Frullania spathulistipa* Steph.

Frullania spathulistipa Steph., Species Hepaticarum 4: 415 (1910), *nom. inval.* ≡ **Frullania sinskeana** J.J.Engel & B.C.Tan

Original material: Hab. Australia orientalis.

Frullania spinifera Taylor, London Journal of Botany 5: 407 (1846)

Original material: Hab. Auckland, New Zealand. Dr. Sinclair (Hook. Herb.).

Frullania spinigastria S.Hatt., Journal of the Hattori Botanical Laboratory 45: 358 (1979)

Original material: Australia: Rodriguez Pass, leg. W. Watts 1000 b (mixed within the original material of *F. minutistipula* Steph., Type in herb. G (18219).

Frullania squarrosula (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 3: 412 (1845)

Basionym: *Jungermannia squarrosula* Hook.f. & Taylor

Frullania steereana S.Hatt., Memoirs of the New York Botanical Garden 45: 553 (1987)

Original material: Queensland: Murray Falls, Kennedy, tropical rain forest in gully, on tree at top of falls, 13 Sep 1985, *G.A.M.Scott s.n.* (holo: NICH 402306; iso: MUCV 7540).

Frullania streimannii S.Hatt., Journal of the Hattori Botanical Laboratory 54: 176 (1983)

Original material: New South Wales: Gloucester River, 28 km WSW of Gloucester, 32°04′S, 151°41′E, 400 m, Eucalyptus-dominated river flats with Casuarina & Myrtaceae along stream line, beside stream, on Myrtaceae, 10 Oct. 1978, *H. Streimann 6448* (holo: NICH; iso: CBG).

Frullania subhampeana E.A.Hodgs., Transactions and Proceedings of the Royal Society of New Zealand 77: 370 (1949) ≡ **Frullania monocera** var. **subhampeana** (E.A.Hodgs.) Hentschel & von Konrat

Original material: on bark of living tree, Puaiti Bush (Rotorua), K. W. A.; on bark in bush remnants round Wairoa, including Morere and Ruakituri, 10 specimens, E. A. H.; bark in bush gully, Panikau (Poverty Bay), G. O. K. S.; Tuaherenikau, V. D. Z.; on bark of trees, Bledisloe Park, Palmerston North. E. A. H.; S. Ruahines (probably) Kapakapanui, 874, 876, Kapiti Island, A. P. D.; Wilton's Bush (Wellington), R. Mason.

Frullania subincumbens S.Hatt., The Bryologist 90: 365-370 (1987)

Original material: Lord Howe Island: Along track from Erskine valley to top of Mt Gower, 31°35′S, 159°5′E, 100–875 m, basalt rock exposed on higher slopes, 17 Nov. 1981, *Vitt 28528* (holo: NICH; iso: ALTA).

Frullania subtropica Steph., Species Hepaticarum 4: 416 (1910)

Original material: Hab. Australia, New South Wales.

Frullania ternatensis Gottsche, Synopsis Hepaticarum 4: 465 (1846)

Original material: Habitat in Insula Ternate, ubi cel. Reinwardt collegit et in Java (Belanger in Hb. L., Hasskarl in Hb. N.).

Frullania ternatensis var. **nonappendiculata** S.Hatt., Journal of the Hattori Botanical Laboratory 38: 174 (1974)

Original material: Philippines: Luzon Is., Mt. Banahao, between Durongawan III to Ilalim, 1800–2300 m (holo: NICH; iso: TENN).

Frullania thiersiae S.Hatt., Beihefte zur Nova Hedwigia 90: 156 (1987)

Original material: Queensland: Cook District, Bellenden Ker National Park, summit of central peak of Mt Bellenden Ker, vicinity of Telecom transmitting station, 17°16′S 145°53′E, 1500 m, microphyll vine-fern thicket, on bark of tree (with *F. aterrima*, *F. rostrata*, *Pleurozia* sp., *Drepanolejeunea* sp., *Acromastigum* sp., *Acrolejeunea*? sp., *Herbertus* sp.), 10 Jul. 1984, *B. Thiers & R.E. Halling 2455* (holotype: NICH; isotypes: AD, NY).

Frullania victoriensis Steph., Species Hepaticarum 4: 418 (1910)

Original material: Hab. Australia, Victoria.

Frullania vittiana S.Hatt., The Bryologist 90: 365-370 (1987)

Original material: Lord Howe Island: N slope of Mt Lidgbird, on trail from Smoking Tree Ridge to Goat House Cave, mountain rain forest near the Goat House, particularly on basalt cliffs to E of Goat House, 31°34′S, 159°5-6′E, 6 Nov. 1981, *Vitt 28348* (holo: NICH; iso: ALTA).

Frullania wattsiana Steph., Species Hepaticarum 4: 559 (1911) = **Frullania falciloba** Taylor ex Lehm.

Original material: Hab. Australia. New South Wales.

Frullania weymouthiana Steph., Species Hepaticarum 4: 660 (1911) = **Frullania aterrima** (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees

Original material: Hab. Tasmania.

Frullania wildii Steph., Hedwigia 33: 169 (1894) = **Frullania pentapleura** Taylor

Original material: Hab. Australia, Queensland, Toowoomba. leg. C. Wild. No. 453. Herb. Brotherus No. 22.

Frullania yorkiana Steph., Species Hepaticarum 4: 558 (1911)

Original material: Australia, Queensland, Cape York.

Gackstroemia Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 397 (1877)

Gackstroemia alpina R.M.Schust., Journal of the Hattori Botanical Laboratory 36: 349 (1973)

Original material: New Zealand, Stewart Island, Tin Range, Schuster 63-1976.

Gackstroemia weindorferi (Herzog) Grolle, Journal of the Hattori Botanical Laboratory 30: 20 (1967)

Basionym: *Lepidolaena weindorferi* Herzog

Geocalyx Nees, Naturgeschichte der Europaischen Lebermoose 1: 97 (1833)

Geocalyx caledonicus Steph., Bulletin de l'Herbier Boissier Series 2 8: 205 (1908)

Original material: Hab. Nova Caledonia (Balansa).

Goebelobryum Grolle, Journal of the Hattori Botanical Laboratory 25: 135 (1962)

Goebelobryum grossitextum (Steph.) Grolle, Journal of the Hattori Botanical Laboratory 25: 137 (1962)

Basionym: *Marsupidium grossitextum* Steph.

Goebelobryum unguiculatum (Hook.f. & Taylor) Grolle, Journal of the Hattori Botanical Laboratory 25: 137 (1962)

Basionym: *Jungermannia unguiculata* Hook.f. & Taylor

Goebelobryum vermiculare J.J.Engel & Glenny, Nova Hedwigia 95: 320 (2012)

Original material: New Zealand: Western Nelson Province, Tiropahi River, Charleston Conservation Area, 110 m, *D. Glenny 9298* (holo: F; iso: CHR 579823).

Gongylanthus Nees, Naturgeschichte der Europaischen Lebermoose 2: 405 (1836)

Gongylanthus scariosus (Lehm.) Steph., Species Hepaticarum 3: 45 (1906)

Basionym: *Jungermannia scariosa* Lehm.

Gottschea Nees ex Mont., Annales des Sciences Naturelles; Botanique 19: 243 (1843)

Gottschea aligera (Nees & Blume) Nees, Synopsis Hepaticarum 17 (1844)

Basionym: *Jungermannia aligera* Nees & Blume

Gottschea brotheri (Steph.) Grolle & Zijlistra, Taxon 33: 89 (1984)

Basionym: *Schistochila brotheri* Steph.

Gottschea ciliata Mitt., Flora Novae-Zelandiae 2: 151 (1854) ≡ **Schistochila ciliata** (Mitt.) Steph.

Gottschea heterodonta Colenso, Transactions and Proceedings of the New Zealand Institute 21: 55 (1889) = **Schistochila repleta** (Hook.f. & Taylor) Steph.

Gottschea hombroniana Mont., Annales des Sciences Naturelles; Botanique 19: 243 (1843) = **Schistochila lehmanniana** (Lindenb.) Carrington & Pearson

Original material: Auckland Islands.

Gottschea isotachyphylla (J.J.Engel & R.M.Schust.) J.J.Engel, Nova Hedwigia 93: 407 (2011)

Basionym: *Paraschistochila isotachyphylla* J.J.Engel & R.M.Schust.

Gottschea lacerata (Steph.) Grolle & Zijlistra, Taxon 33: 89 (1984)

Basionym: *Schistochila lacerata* Steph.

Gottschea philippinensis Mont., Annales des Sciences Naturelles; Botanique 19: 224 (1843)

Original material: Hab. ad corticem arborum in Manilla detexit celeb. Gaudichaud.

Gottschea pinnatifolia (Hook.) Nees, Synopsis Hepaticarum 22 (1844)

Basionym: *Jungermannia pinnatifolia* Hook.

Gottschea tuloides (Hook.f. & Taylor) Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 620 (1846)

Basionym: *Jungermannia tuloides* Hook.f. & Taylor

Gymnanthe concinna Mitt., Flora Tasmaniae 2(8): 230 (1859) ≡ **Acrobolbus concinnus** (Mitt.) Grolle

Original material: Hab. Tasmania, Gunn, creeping over *Jungermannia tasmanica* Tayl.

Gymnanthe drummondii Mitt., Flora Novae-Zelandiae 2(6): 144 (1854), *nom. illeg.* = **Lethocolea pansa** (Taylor) G.A.M.Scott & K.G.Beckm.

Original material: Hab. Northern Island: forests of Titiokura, Colenso.

Gymnanthe setulosa Mitt., Flora Novae-Zelandiae 2(6): 144 (1854) = **Acrobolbus setulosus** (Mitt.) Briscoe

Original material: Hab. Northern Island: Tararua Mountains, with *Plagiochila falcata*, Colenso.

Gymnanthe tenella Taylor ex Lehm., Novarum et Minus Cognitarum Stirpium Pugillus 8: 1 (1844) ≡ **Acrobolbus tenellus** (Taylor ex Lehm.) Trevis.

Original material: Habitat in Terra van Diemen (Herb. Taylor et Greville)

Gymnomitrion Corda, Naturalientausch 12: 651 (1829), *nom. cons.*

Gymnomitrion atrocapillum Hook.f. & Taylor, New Hepaticae. London Journal of Botany 5: 258 (1846) ≡ **Herzogobryum atrocapillum** (Hook.f. & Taylor) Grolle

Original material: Hab. On clay, at an elevation of 600 feet, Foul Haven, Kerguelen's Land, May, 1840, Dr. Joseph D. Hooker.

Gymnomitrion incompletum (Gottsche) R.M.Schust., Revue Bryologique et Lichenologique 34: 279 (1966)

Basionym: *Jungermannia incompleta* Gottsche

Gymnomitrion marionense S.W.Arnell, Svensk Botanische Tidskrift 47: 415 (1953) = **Gymnomitrion atrocapillum** Hook.f. & Taylor

Original material: Marion Island, Rand 3788

Gymnomitrion orbiculatum Colenso, Transactions and Proceedings of the New Zealand Institute 18: 236 (1886) ≡ **Solenostoma orbiculatum** (Colenso) R.M.Schust.

Original material: Hab. Sides of perpendicular wet cliffs, River Mangatawhainui, near Norsewood, County of Waipawa ; growing very closely intermixed among Aneura muscoides, Col. ;* October, 1884: W.C.

Haplomitrium Nees, Naturgeschichte der Europaischen Lebermoose 1: 109 (1833), *nom. cons.*

Haplomitrium gibbsiae (Steph.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 225 (1963)

Basionym: *Calobryum gibbsiae* Steph.

Haplomitrium intermedium Berrie, Proceedings of the Linnean Society of New South Wales 87: 191 (1962)

Original material: New South Wales: Blue Mountains, between one and two miles along the road from Bilpin to Mount Irvine, alt. 1700' (holo: SYD bryophyte no. 2/62).

Harpalejeunea (Spruce) Schiffn., Hepaticae. Die Naturlichen Pflanzenfamilien 1(3): 126 (1893)

Basionym: *Lejeunea* subg. *Harpalejeunea* Spruce

Harpalejeunea filicuspis (Steph.) Mizut., Journal of the Hattori Botanical Laboratory 37: 197 (1973) ≡ **Microlejeunea filicuspis** (Steph.) Heinrichs, Schäf.-Verw., Pócs & S.Dong

Basionym: *Drepanolejeunea filicuspis* Steph.

Harpalejeunea latitans (Hook.f. & Taylor) Grolle, Journal of the Hattori Botanical Laboratory 47: 239 (1980) ≡ **Microlejeunea latitans** (Hook.f. & Taylor) Heinrichs, Schäf.-Verw., Pócs & S.Dong

Basionym: *Jungermannia latitans* Hook.f. & Taylor

Harpalejeunea spinosa Mizut., Journal of the Hattori Botanical Laboratory 37: 196 (1973) ≡ **Microlejeunea spinosa** (Mizut.) Grolle

Hepatostolonophora J.J.Engel & R.M.Schust., Journal of the Hattori Botanical Laboratory 46: 91 (1979)

Hepatostolonophora paucistipula (Rodway) J.J.Engel, Journal of the Hattori Botanical Laboratory 46: 103 (1979)

Basionym: *Lophocolea paucistipula* Rodway

Hepatostolonophora rotata (Hook.f. & Taylor) J.J.Engel, Journal of the Hattori Botanical Laboratory 46: 98 (1979)

Basionym: *Jungermannia rotata* Hook.f. & Taylor

Herbertus Gray, A Natural Arrangement of British Plants 1: 705 (1821)

Herbertus alpinus (Steph.) E.A.Hodgs., Transactions of the Royal Society of New Zealand, Botany 3: 185 (1967) = **Herbertus oldfieldianus** (Steph.) Rodway

Basionym: *Schisma alpinum* Steph.

Herbertus huerlimannii H.A.Mill., Journal of the Hattori Botanical Laboratory 31: 248 (1968) = **Herbertus longifissus** Steph.

Original material: New Caledonia: In crevices between peridotite rocks, shaded and humid, top of "Sommet To" (NE of Dumbea), 880 m, 10 May 1951, *H. Hurlimann 2575* (holo: Z; iso: G, MU, NICH).

Herbertus longifissus Steph., Hedwigia 34: 44 (1895)

Original material: Hab. Samoa, leg. Powell No. 48. Herb. Berol.

Herbertus oldfieldianus (Steph.) Rodway, Tasmanian Bryophyta 2: 72 (1916)

Basionym: *Schisma oldfieldianum* Steph.

Herpetium involutum Mont., Annales des Sciences Naturelles; Botanique 19: 253 (1843) ≡ **Bazzania involuta** (Mont.) Trevis.

Original material: Hab. caulibus Hypni comosi intricatara in insulis Auckland legit cl. Homhron

Herzogobryum Grolle, Revue Bryologique et Lichenologique 32: 160 (1964)

Herzogobryum atrocapillum (Hook.f. & Taylor) Grolle, Oesterreichische Botanische Zeitschrift 113: 228 (1966)

Basionym: *Gymnomitrion atrocapillum* Hook.f. & Taylor

Herzogobryum filarium Grolle, Feddes Repertorium Beiheft 86: 73 (1975) = **Cephalomitrion aterrimum** (Steph.) R.M.Schust.

Original material: Tasmania, Lake St. Clair, on lake shore, Scott 574.

Herzogobryum teres (Carrington & Pearson) Grolle, Oesterreichische Botanische Zeitschrift 113: 223 (1966) ≡ **Syzygiella teres** (Carrington & Pearson) Váňa

Basionym: *Jungermannia teres* Carrington & Pearson

Heteroscyphus Schiffn., Oesterreichische Botanische Zeitschrift 60: 171 (1910), *nom. cons.*

Heteroscyphus affinis (Gottsche) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 399 (1985) = **Chiloscyphus austrigenus** subsp. **okaritanus** (Steph.) J.J.Engel

Basionym: *Chiloscyphus affinis* Gottsche

Heteroscyphus allodontus (Hook.f. & Taylor) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 399 (1985)

Basionym: *Jungermannia allodonta* Hook.f. & Taylor

Heteroscyphus ammophilus (Colenso) R.M.Schust., Hepaticae and Anthocerotae of North America. Volume 4: 248 (1980)

Basionym: *Chiloscyphus ammophilus* Colenso

Heteroscyphus ammophilus var. **obtusifolius** J.J.Engel & G.L.Merr., Nova Hedwigia 99: 158 (2014)

Original material: New Zealand: Stewart Is., Pegasus Harbour, Pegasus Creek, 0.5–1.0 mile above mouth, 100–220 ft, *R.M.Schuster 59837* (holo: F; iso: CHR).

Heteroscyphus argutus (Reinw., Blume & Nees) Schiffn., Oesterreichische Botanische Zeitschrift 60: 172 (1910)

Basionym: *Jungermannia arguta* Reinw., Blume & Nees

Heteroscyphus aselliformis (Reinw., Blume & Nees) Schiffn., Oesterreichische Botanische Zeitschrift 60: 172 (1910)

Basionym: *Jungermannia aselliformis* Reinw., Blume & Nees

Heteroscyphus biciliatus (Hook.f. & Taylor) J.J.Engel, Journal of the Hattori Botanical Laboratory 70: 71 (1991) = **Heteroscyphus allodontus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Basionym: *Jungermannia biciliata* Hook.f. & Taylor

Heteroscyphus billarderii (Schwägr.) Schiffn., Oesterreichische Botanische Zeitschrift 60: 172 (1910)

Basionym: *Jungermannia billarderii* Schwägr.

Heteroscyphus billarderii var. **clasmatocoleoides** (J.J.Engel & G.L.Merr.) J.J.Engel, Nova Hedwigia 100: 565 (2015)

Basionym: *Heteroscyphus circumdentatus* var. *clasmatocoleoides* J.J.Engel & G.L.Merr.

Heteroscyphus cambewarranus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 399 (1985) = **Heteroscyphus allodontus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Basionym: *Chiloscyphus cambewarranus* Steph.

Heteroscyphus ciliatus (Steph.) Schiffn., Oesterr. Bot. Z. 60: 172 (1910)

Basionym: *Chiloscyphus ciliatus* Steph.

Heteroscyphus circumdentatus (W.Martin & E.A.Hodgs.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 399 (1985) = **Heteroscyphus billarderii** var. **billarderii**

Basionym: *Chiloscyphus circumdentatus* W.Martin & E.A.Hodgs.

Heteroscyphus circumdentatus var. *clasmatocoleoides* J.J.Engel & G.L.Merr., Polish Botanical Journal 58: 95 (2013) = **Heteroscyphus billarderii** var. **clasmatocoleoides** (J.J.Engel & G.L.Merr.) J.J.Engel

Original material: New Zealand: Stewart Is., W end of Tin Range, near crest, N of Port Pegasus, 1200–1500 ft, *Schuster 53143* (holo: F; iso: CHR).

Heteroscyphus coalitus (Hook.) Schiffn., Oesterreichische Botanische Zeitschrift 60: 172 (1910)

Basionym: *Jungermannia coalita* Hook.

Heteroscyphus coalitus var. **simplicifolius** J.J.Engel, Nova Hedwigia 100: 572 (2015)

Original material: Tasmania: seaward slopes near Coal Bluff, 0–50 m, *Norris 30287* (holo: F).

Heteroscyphus colensoi (Mitt.) Schiffn., Oesterreichische Botanische Zeitschrift 60: 172 (1910) = **Heteroscyphus oblongifolius** (Hook.f. & Taylor) Schiffn.

Basionym: *Lophocolea colensoi* Mitt.

Heteroscyphus combinatus (Nees) Schiffn., Oesterreichische Botanische Zeitschrift 60: 172 (1910)

Basionym: *Jungermannia combinata* Nees

Heteroscyphus conjugatus (Mitt.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 399 (1985)

Basionym: *Chiloscyphus conjugatus* Mitt.

Heteroscyphus cuneistipulus (Steph.) Schiffn., Oesterreichische Botanische Zeitschrift 60: 172 (1910)

Basionym: *Chiloscyphus cuneistipulus* Steph.

Engel and Glenny (2018a) treat *Heteroscyphus cuneistipulus* as endemic to New Zealand

Heteroscyphus cymbaliferus (Hook.f. & Taylor) J.J.Engel & R.M.Schust., Nova Hedwigia 49: 402 (1985) ≡ **Tetracymbaliella cymbalifera** (Hook.f. & Taylor) Grolle

Basionym: *Jungermannia cymbalifera* Hook.f. & Taylor

Heteroscyphus decipiens (Gottsche) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 402 (1985) ≡ **Tetracymbaliella decipiens** (Gottsche) Grolle

Basionym: *Chiloscyphus decipiens* Gottsche

Heteroscyphus echinellus (Lindenb. & Gottsche) J.J.Engel & Xiao L.He, The Bryologist 113: 155 (2010)

Basionym: *Lophocolea echinella* Lindenb. & Gottsche

Heteroscyphus fissistipus (Hook.f. & Taylor) Schiffn., Oesterreichische Botanische Zeitschrift 60: 172 (1910)

Basionym: *Jungermannia fissistipa* Hook.f. & Taylor

Heteroscyphus fissistipus var. **repandus** J.J.Engel, Nova Hedwigia 99: 165 (2014)

Original material: New Zealand, North Island: Gisborne Ecological Prov., Waioeka Gorge Scenic Reserve, State Highway 2, *Engel & von Konrat 27888* (holo: F; iso: AK).

Heteroscyphus fissistipus var. *repandus* does not occur in Australia.

Heteroscyphus gunnianus (Mitt.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 400 (1985)

Basionym: *Chiloscyphus gunnianus* Mitt.

Heteroscyphus heterophyllus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 400 (1985) ≡ **Leptoscyphus heterophyllus** (Steph.) J.J.Engel

Basionym: *Chiloscyphus heterophyllus* Steph.

Heteroscyphus knightii (Steph.) Grolle, Journal of the Hattori Botanical Laboratory 61: 251 (1986)

Basionym: *Chiloscyphus knightii* Steph.

Heteroscyphus levieri (Steph.) Schiffn., Oesterreichische Botanische Zeitschrift 60: 172 (1910)

Basionym: *Chiloscyphus levieri* Steph.

Heteroscyphus limosus (Carrington & Pearson) Schiffn., Oesterreichische Botanische Zeitschrift 60: 172 (1910)

Basionym: *Chiloscyphus limosus* Carrington & Pearson

Heteroscyphus lingulatus (Colenso) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 400 (1985)

Basionym: *Chiloscyphus lingulatus* Colenso

Engel and Glenny (2018a) treat *Heteroscyphus lingulatus* as endemic to New Zealand.

Heteroscyphus longifolius (Carrington & Pearson) Schiffn., Oesterr. Bot. Z. 60: 172 (1910) = **Heteroscyphus fissistipus** (Hook.f. & Taylor) Schiffn.

Basionym: *Chiloscyphus fissistipus* var. *longifolius* Carrington & Pearson

#Heteroscyphus lyallii (Mitt.) R.M.Schust., The Hepaticae and Anthocerotae of North America, East of the Hundredth Meridian 4: 248 (1980)

Basionym: *Chiloscyphus lyallii* Mitt.

Engel and Glenny (2018a) treat *Heteroscyphus lyallii* as endemic to New Zealand, and suggest the species may be confused with *H. fissistipus* in Australia.

Heteroscyphus maximus (Steph) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 400 (1985) = **Heteroscyphus coalitus** (Hook.) Schiffn.

Basionym: *Chiloscyphus maximus* Steph.

Heteroscyphus menziesii (Mitt.) J.J.Engel, Polish Botanical Journal 58: 95 (2013)

Basionym: *Chiloscyphus menziesii* Mitt.

Heteroscyphus mononuculus J.J.Engel, Journal of the Hattori Botanical Laboratory 90: 241 (2001)

Original material: New Zealand: South Island, Westland Province, Arthur's Pass National Park, Kelly Range, vicinity of Carroll Hut, above Kellys Creek, N of Otira, 1150 m, *Engel 18399* (holo: F; iso: CHR).

Heteroscyphus mononuculus var. **ammophilopsis** J.J.Engel, Nova Hedwigia 99: 166 (2014)

Original material: New Zealand: South Is., Fiordland National Park, on track from Lake Mackenzie to Harris Saddle, ca. 3800 ft, *R.M. Schuster 67-367b* (holo: F).

Heteroscyphus moorei (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 400 (1985) = **Heteroscyphus conjugatus** (Mitt.) J.J.Engel & R.M.Schust.

Basionym: *Chiloscyphus moorei* Steph.

Heteroscyphus muelleri (Gottsche) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 400 (1985) = **Chiloscyphus austrigenus** subsp. **okaritanus** (Steph.) J.J.Engel

Basionym: *Chiloscyphus muelleri* Gottsche

Heteroscyphus multifidus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 400 (1985)

Basionym: *Chiloscyphus multifidus* Steph.

Heteroscyphus multifidus var. **subintegerrimus** J.J.Engel, Nova Hedwigia 100: 562 (2015)

Original material: Tasmania: Cradle Mtn, Lake St Clair National Park, *J.J. Engel 19573* (holo: F; iso: HO).

Heteroscyphus oblongifolius (Hook.f. & Taylor) Schiffn., Oesterreichische Botanische Zeitschrift 60: 172 (1910)

Basionym: *Jungermannia oblongifolia* Hook.f. & Taylor

Engel & Glenny (2019a) treat *Heteroscyphus oblongifolius* as endemic to New Zealand.

Heteroscyphus physanthus (Hook.f. & Taylor) R.M.Schust., The Hepaticae and Anthocerotae of North America, East of the Hundredth Meridian 4: 248 (1980) = **Leptoscyphus physanthus** (Hook.f. & Taylor) J.J.Engel

Basionym: *Jungermannia physantha* Hook.f. & Taylor

#Heteroscyphus planiusculus (Hook.f. & Taylor) J.J.Engel, Journal of the Hattori Botanical Laboratory 68: 303 (1990)

Basionym: *Jungermannia planiuscula* Hook.f. & Taylor

Engel & Glenny (2018a) treat *Heteroscyphus planiusculus* as endemic to New Zealand.

Heteroscyphus sexdentatus (Steph.) J.J.Engel, Journal of the Hattori Botanical Laboratory 74: 35 (1993) = **Heteroscyphus coalitus** (Hook.) Schiffn.

Basionym: *Lophocolea sexdentata* Steph.

Heteroscyphus simillimus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 400 (1985) ≡ **Heteroscyphus billarderii** (Schwägr.) Schiffn.

Basionym: *Chiloscyphus simillimus* Steph.

Heteroscyphus sinuosus (Hook.) Schiffn., Oesterreichische Botanische Zeitschrift 60: 172 (1910)

Basionym: *Jungermannia sinuosa* Hook.

Heteroscyphus splendens (Lehm. & Lindenb.) Grolle, Acta Botanica Fennica 125: 68 (1984)

Basionym: *Jungermannia splendens* Lehm. & Lindenb.

Heteroscyphus supinus (Hook.f. & Taylor) R.M.Schust., The Hepaticae and Anthocerotae of North America, East of the Hundredth Meridian 4: 248 (1980)

Basionym: *Chiloscyphus supinus* Hook.f. & Taylor

Heteroscyphus tasmanicus (Steph.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 400 (1985)

Basionym: *Chiloscyphus tasmanicus* Steph.

Heteroscyphus triacanthus (Hook.f. & Taylor) Schiffn., Oesterreichische Botanische Zeitschrift 60: 172 (1910)

Basionym: *Jungermannia triacantha* Hook.f. & Lev.

Heteroscyphus triacanthus var. **magnistipulatus** J.J.Engel, Nova Hedwigia 99: 167 (2014)

Original material: New Zealand: South Island: Canterbury Prov., Aoraki/Mt Cook National Park, southwest-facing cliffs of Wakefield Track, overlooking Hooker river, east of town of Mt Cook, 720 m, *Engel 18295* (holo: F; iso: CHR).

Heteroscyphus tridentatus (Mitt.) J.J.Engel & R.M.Schust., Nova Hedwigia 39: 401 (1985) = **Heteroscyphus knightii** (Steph.) Grolle

Basionym: *Chiloscyphus tridentatus* Mitt.

Heteroscyphus varians (Steph.) J.J.Engel, Journal of the Hattori Botanical Laboratory 68: 303 (1990)

Basionym: *Lophocolea varians* Steph.

Heteroscyphus weymouthianus (Steph.) Schiffn., Oesterreichische Botanische Zeitschrift 60: 172 (1910) = **Heteroscyphus menziesii** (Mitt.) J.J.Engel

Basionym: *Chiloscyphus weymouthianus* Steph.

Heteroscyphus zollingeri (Gottsche) Schiffn., Oesterreichische Botanische Zeitschrift 60: 171 (1910)

Basionym: *Chiloscyphus zollingeri* Gottsche

Hygrobiella macgregorii Steph., Hedwigia 34: 45 (1895) ≡ **Cephalozia macgregorii** (Steph.) Váňa

Original material: Hab. Nova Guinea in Monte Suckling legit Sir Wm Macgregor 1891. comm. Ferd. von Muller, Melbourne.

Hygrolejeunea norfolkiensis (Steph.) Steph., Species Hepaticarum 5: 573 (1914) = **Lejeunea gracilipes** (Taylor) Spruce

Basionym: *Lejeunea norfolkiensis* Steph.

Hygrolejeunea rostrata Steph., Species Hepaticarum 5: 573 (1914) = **Lejeunea lumbricoides** (Nees) Nees

Original material: Hab. Australia, Norfolk Island.

Hygrolejeunea sacculifera Steph., Species Hepaticarum 5: 574 (1914) = **Lejeunea sordida** (Nees) Mont.

Original material: Hab. Australia orientalis.

Hygrolejeunea sayeri Steph., Hedwigia 28: 173 (1889), *nom. inval.* = **Lepidolejeunea bidentula** (Steph.) R.M.Schust.

Hygrolembidium R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 277 (1963)

Hygrolembidium acrocladum (Berggr.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 277 (1963)

Basionym: *Aplozia acroclada* Berggr.

Hymenophyton Dumort., Recueil d'Observations sur les Jungermanniacees: 25 (1835)

Hymenophyton flabellatum (Labill.) Dumort. ex Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 430 (1877)

Basionym: *Jungermannia flabellata* Labill.

Hymenophyton leptopodum (Hook.f. & Taylor) A.Evans, Transactions of the Connecticut Academy of Arts and Sciences 8: 274 (1892)

Basionym: *Jungermannia leptopoda* Hook.f. & Taylor

Isolembidium R.M.Schust., Nova Hedwigia 15: 466 (1968)

Isolembidium anomalum (Rodway) Grolle, Journal of Bryology 10: 264 (1979)

Basionym: *Lembidium anomalum* Rodway

Isolembidium anomalum var. **cucullatum** (E.A.Hodgs.) J.J.Engel & R.M.Schust., Journal of the Hattori Botanical Laboratory 63: 268 (1987)

Basionym: *Lembidium cucullatum* E.A.Hodgs.

Isophyllaria E.A.Hodgs. & Allison, Transactions of the Royal Society of New Zealand. Botany 3(4): 68 (1965)

Isophyllaria attenuata (Rodway) E.A.Hodgs., Journal of the Royal Society of New Zealand 2: 111 (1972)

Basionym: *Isotachis attenuata* Rodway

Isotachis Mitt., Flora Novae-Zelandiae 2(6): 148 (1854)

Isotachis attenuata Rodway, Papers and Proceedings of the Royal Society of Tasmania 1916: 47 ≡ **Isophyllaria attenuata** (Rodway) E.A.Hodgs.

Original material: Mt. Wellington Plateau.

Isotachis grandis Carrington & Pearson, Proceedings of the Linnean Society of New South Wales, Series 2 2: 1041 (1888)

Original material: On wet rocks, Lawson, Blue Mountains, June 1884.

Isotachis gunniana Mitt., Flora Tasmaniae 2(8): 232 (1859) = **Isotachis intortifolia** (Hook.f. & Taylor) Gottsche

Original material: Hab. Arthur's Lakes, Gunn, Archer.

Isotachis inflexa Gottsche, Fragmenta Phytographiae Australiae 11(Suppl.): 61 (1880) = **Isotachis intortifolia** (Hook.f. & Taylor) Gottsche

Original material: Blue Mountains, 1871, W. Woolls.

Isotachis intortifolia (Hook.f. & Taylor) Gottsche, Annales des Sciences Naturelles; Botanique 1: 121 (1864)

Basionym: *Jungermannia intortifolia* Hook.f. & Taylor

Isotachis hastatistipula (Steph.) J.J.Engel, Phytotaxa 183: 299 (2014)

Basionym: *Balantiopsis hastatistipula* Steph.

Isotachis mitteniana Colenso, Transactions and Proceedings of the New Zealand Institute 21: 69 (1889) ≡ **Cryptolophocolea mitteniana** (Colenso) L.Söderstr.

Isotachis montana Colenso, Transactions and Proceedings of the New Zealand Institute 21: 68 (1889)

Original material: Hab. Among other Hepaticca and small mosses, on the ground, slopes of Mount Tongariro, County of East Taupo; 1887 : Mr. H. Hill.

Isotachis nigella Herzog, Memoranda Societatis pro Fauna et Flora Fennica 27: 107 (1951) ≡ **Eoisotachis nigella** (Herzog) R.M.Schust.

Isotachis pusilla Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 99 (1914) = **Balantiopsis diplophylla** (Hook.f. & Taylor) Mitt.

Original material: Hab. Tasmania (Weymouth).

Isotachis riparia Rodway, Tasmanian Bryophyta 2: 63 (1916)

Original material: Cradle Mtn.

Isotachis terricola Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 110 (1914) = **Isotachis intortifolia** (Hook.f. & Taylor) Gottsche

Original material: Hab. Australia (Blackheath): Watts, 1016.

Jackiella Schiffn., Denkschriften der Kaiserlichen Akademie der Wissenschaften, Mathematisch-Naturwissenschaftliche Klasse 70: 211 (1900)

Jackiella curvata E.A.Hodgs. & Allison, Transactions of the Royal Society of New Zealand 85: 571 (1958)

Original material: on bush road, Ngongotaha Mt., ca. 2000 ft, Rotorua, 6386. hb. E.A.H., coll. K.W.Allison, 6/4/36.

Jackiella flava Grolle, Journal of the Hattori Botanical Laboratory 33: 222 (1970) ≡ **Brevianthus flavus** (Grolle) J.J.Engel & R.M.Schust.

Jackiella javanica Schiffn., Denkschriften der Kaiserlichen Akademie der Wissenschaften, Mathematisch-Naturwissenschaftliche Klasse 70: 212 (1900)

Jamesoniella (Spruce) Carrington, London Catalogue of British Mosses and Hepatics, 2nd edition 2: 25 (1881) = **Syzygiella** Spruce

Basionym: *Jungermannia* subg. *Jamesoniella* Spruce

Jamesoniella cambewarrana Steph., Species Hepaticarum 6: 97 (1917) = **Syzygiella tasmanica** (Hook.f. & Taylor) K.Feldberg, Váňa, Hentschel & Heinrichs

Original material: Hab. Australia, Cambewarra. Nova Zelandia, Great Barrier Islands. (Watts legit.)

Jamesoniella colorata (Lehm.) Spruce ex Schiffn., Hepaticae. Die Naturlichen Pflanzenfamilien 1(3): 83 (1893) ≡ **Syzygiella colorata** (Lehm.) Feldberg, Váňa, Hentsche & Heinrichs

Basionym: *Jungermannia colorata* Lehm.

Jamesoniella fragilis Steph., Species Hepaticarum 2: 102 (1901) ≡ **Solenostoma orbiculatum** (Colenso) R.M.Schust.

Replaced synonym: Jungermannia fragilis Gottsche

Jamesoniella monodon (Taylor ex Lehm.) N.Kitag., Bulletin of Nara University of Education. Series B, Natural Sciences 30: 47 (1981) ≡ **Cuspidatula monodon** (Taylor ex Lehm.) Steph.

Basionym: *Jungermannia monodon* Taylor ex Lehm.

Jamesoniella nigrescens Steph., Hedwigia 34: 48 (1895) ≡ **Syzygiella nigrescens** (Steph.) Feldberg, Váňa, Hentsche & Heinrichs

Original material: Hab. Nova Zelandia, Great Barrier Island, leg. Kirk no. 87.

Jamesoniella robusta Steph., Species Hepaticarum 6: 102 (1917), *nom. illeg.* = **Syzygiella tasmanica** (Hook.f. & Taylor) K.Feldberg, Váňa, Hentschel & Heinrichs

Original material: Hab. Australia Cambewarra (Watts legit).

Jamesoniella stephaniana Beauverd, Species Hepaticarum 6: 571 (1924) = **Syzygiella tasmanica** (Hook.f. & Taylor) K.Feldberg, Váňa, Hentschel & Heinrichs

Jamesoniella tasmanica (Hook.f. & Taylor) Steph., Bulletin de l'Herbier Boissier Series 2 1: 1037 (1901) ≡ **Syzygiella tasmanica** (Hook.f. & Taylor) K.Feldberg, Váňa, Hentschel & Heinrichs

Basionym: *Jungermannia tasmanica* Hook.f. & Taylor

Jubula Dumort., Commentationes Botanicae: 112 (1822), *nom. cons.*

Jubula gaudichaudii Nees & Mont., Annales des Sciences Naturelles; Botanique 5: 64 (1836) ≡ **Frullania gaudichaudii** (Nees & Mont.) Nees & Mont. ex Gottsche, Lindenb. & Nees

Original material: Habitat ad Rio de Janeiro Brasiliae. (Herb. Montng.)

Jubula hutchinsiae (Hook.) Dumort., Commentationes Botanicae: 112 (1822)

Basionym: *Jungermannia hutchinsiae* Hook.

Jubula hutchinsiae subsp. **australiae** Pócs & Cairns, Nova Hedwigia 86(1-2): 232 (2008)

Jungermannia L., Species Plantarum 2: 1131 (1753)

Jungermannia abbreviata Hook.f. & Taylor, London Journal of Botany 3: 374 (1844) = **Acrobolbus surculosus** (Nees) Trevis.

Original material: Hab. Lord Auckland's group.

Jungermannia abietina Nees, Enumeratio Plantarum Cryptogamicarum Javae: 76 (1830) ≡ **Plagiochila abietina** (Nees) Nees & Mont.

Jungermannia aculeata Hook.f. & Taylor, Hepaticae Novae Zelandiae et Tasmaniae. London Journal of Botany 3: 578 (1844) = **Plagiochila fasciculata** Lindenb.

Original material: Van Diemen's Land.

Jungermannia adnexa Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 4: 58 (1832) ≡ **Bazzania adnexa** (Lehm. & Lindenb.) Trevis.

Original material: Habitat in Nova Hollandia.

Jungermannia albovirens Hook.f. & Taylor, London Journal of Botany 3: 397 (1844) ≡ **Cheilolejeunea albovirens** (Hook.f. & Taylor) E.A.Hodgs.

Original material: Hab. Lord Auckland's group.

Jungermannia albula Hook.f. & Taylor, London Journal of Botany 3: 387 (1844) = **Lepidozia ulothrix** (Schwägr.) Lindenb.

Original material: Hab. Lord Auckland's group ; growing on Gottschea Lehmanniana, Lind.

Jungermannia alcicornis Hook.f. & Taylor, London Journal of Botany 3: 479 (1844) ≡ **Riccardia alcicornis** (Hook.f. & Taylor) Trevis.

Original material: Hab. Cape Horn.

Jungermannia aligera Nees & Blume, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 11: 135 (1823) ≡ **Gottschea aligera** (Nees & Blume) Nees

Jungermannia allodonta Hook.f. & Taylor, London Journal of Botany 3: 382 (1844) ≡ **Heteroscyphus allodontus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Original material: Hab. Lord Auckland's Group.

Jungermannia alternifolia Hook.f. & Taylor, London Journal of Botany 4: 83 (1845) = **Chiloscyphus leptanthus** (Steph.) J.J.Engel & R.M.Schust.

Original material: Hab. New Zealand.

Jungermannia alternifolia was included as a synonym of *Chiloscyphus leptanthus* by McCarthy (2003). *Chiloscyphus leptanthus* is a South American species that does not occur in New Zealand or Tasmania (Engel & Glenny 2019a). The attribution of the original material to New Zealand is in error, the type gathering of *Jungermannia alternifolia* was made on Falkland Island (Engel 2010).

Jungermannia alterniloba Hook.f. & Taylor, London Journal of Botany 3: 572 (1844) ≡ **Lobatiriccardia alterniloba** (Hook.f. & Taylor) Furuki

Original material: Hab. New Zealand.

Jungermannia aneurismalis Hook.f. & Taylor, London Journal of Botany 4: 86 (1845) ≡ **Radula aneurismalis** (Hook.f. & Taylor) Nees ex Gottsche, Lindenb. & Nees

Original material: Hab. Tasmania, on *Metzgeria furcata* L.

Jungermannia angulosa Dicks., Fasciculus Plantarum Cryptogamicarum Britanniae 1: 7 (1785) ≡ **Fossombronia angulosa** (Dicks.) Raddi

Jungermannia angusta Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 4: 52 (1832) ≡ **Lejeunea angusta** (Lehm. & Lindenb.) Mont.

Original material: Habitat ad Xalapam Mexicanorum.

Jungermannia anisostoma Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 6: 57 (1834) ≡ **Acromastigum anisostomum** (Lehm. & Lindenb.) A.Evans

Original material: Habitat ad portum Dusky Bay novae Zeelandiae. (Herb. Hookeri.).

Jungermannia apiculata Reinw., Blume & Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12: 222. 1825. ≡ **Frullania apiculata** (Reinw., Blume & Nees) Dumort.

Original material: Habitat in montibus Bonkat et Sadjra Provinciae Bantam ad arborum cortices inter muscos. Blume. V. c. perichaetiis inanibus.

Jungermannia appressifolia Mitt., Journal of the Proceedings of the Linnean Society, Botany 5: 90 (1861)

Jungermannia arbuscula Brid. ex Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 4: 63 (1832) ≡ **Plagiochila arbuscula** (Brid. ex Lehm. & Lindenb.) Lindenb.

Original material: Habitat in Java insula. Commerson. Secimina adsunt in Herbario Brideliano.

Jungermannia arcuata Nees, Enumeratio plantarum cryptogamicarum Javae et insularum adiacentium: 38 (1830) ≡ **Acrolejeunea arcuata** (Nees) Grolle & Gradstein

Jungermannia argentea Hook.f. & Taylor, London Journal of Botany 3: 400 (1844) ≡ **Zoopsis argentea** (Hook.f. & Taylor) Hook.f. ex Gottsche, Lindenb. & Nees

Original material: Hab. Lord Auckland's Group.

Jungermannia arguta Reinw., Blume & Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12(1): 206 (1825) ≡ **Heteroscyphus argutus** (Reinw., Blume & Nees) Schiffn.

Original material: Habitat in montis Sadjra, meridionalibus et orientam spectantibus, PRovinciae Bantam iavae insulae, prope Rawayan in tumulis sacris Baduorum, ad arborum cortices. Blume. V. s. fr.

Jungermannia aselliformis Reinw., Blume & Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12: 412 (1825) ≡ **Heteroscyphus aselliformis** (Reinw., Blume & Nees) Schiffn.

Original material: Habitat in Iava insula, terrestris. Blume. V. s. fr.

Jungermannia aterrima Hook.f. & Taylor, Hepaticae Antarcticae. London Journal of Botany 3: 395 (1844) ≡ **Frullania aterrima** (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees

Original material: Hab. Lord Auckland's Group.

Jungermannia auriculata Wilson & Hook., Musci Americani: 170 (1841) ≡ **Thysananthus auriculatus** (Wilson & Hook) Sukkharak & Gradst.

Jungermannia australis Hook.f. & Taylor, London Journal of Botany 3: 383 (1844), *nom. illeg.* = **Chiloscyphus novae-zeelandiae** var. **grandistipulus** (Schiffn.) J.J.Engel

Jungermannia austrigena Hook.f. & Taylor, London Journal of Botany 3: 466 (1844) ≡ **Chiloscyphus austrigenus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Original material: Hab. On moist banks, Hermite Island, Cape Horn.

Jungermannia balfouriana Hook.f. & Taylor, London Journal of Botany 3: 556 (1844) ≡ **Schistochila balfouriana** (Hook.f. & Taylor) Steph.

Original material: Hab. New Zealand, Dr Stanger and Mr Colenso

Jungermannia bantamensis Reinw., Blume & Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12(1): 235 (1824) ≡ **Plagiochila bantamensis** (Reinw., Blume & Nees) Mont.

Original material: Habitat in montibus altis Provinciae Bantam lavae insulae ad terram. Blume. V. c. fr.

Jungermannia bastovii Carrington & Pearson, Papers and Proceedings of the Royal Society of Tasmania 1887: 7 (1888) = **Cephaloziella exiliflora** (Taylor) Douin

Original material: Hab., " Ploughed Fields," Mount Wellington, January 1st, 1886. 261.

Jungermannia biciliata Hook.f. & Taylor, London Journal of Botany 4: 84 (1845) ≡ **Heteroscyphus allodontus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Original material: Hab. New Zealand.

Jungermannia bidens Reinw., Blume & Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12(1): 208 (1824) ≡ **Schizophyllopsis bidens** (Reinw., Blume et Nees) Váňa & L.Söderstr.

Original material: Frustula huius speciei , vel adeo satis distinctae inter alias Jungermannias javanicas reperimus s. fr.

Jungermannia bidentata L., Species Plantarum 2: 1132 (1753) = **Chiloscyphus latifolius** (Nees) J.J.Engel & R.M.Schust.

Original material: Habitat in Europae umbrosis humidis.

Jungermannia billarderii Schwägr., Historiae muscorum hepaticorum prodromus: 19 (1814) ≡ **Heteroscyphus billarderii** (Schwägr.) Schiffn.

Original material: Australas s.v.

Published using the intentional latinisation 'billarderii', in compliance with Art. 60.9

Jungermannia bispinosa Hook.f. & Taylor, London Journal of Botany 3: 378 (1844) ≡ **Chiloscyphus bispinosus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Original material: Hab. Campbell's Island.

Jungermannia blepharophora Nees, Enumeratio Plantarum Cryptogamicarum Javae: 71 (1830) ≡ **Plagiochila blepharophora** (Nees) Lindenb.

Jungermannia boryana F.Weber, Historiae muscorum hepaticorum prodromus: 58 (1815) ≡ **Cladoradula boryana** (F.Weber) M.A.M.Renner, Gradst., Ilk.-Borg. & F.R.Oliveira-da-Silva

Jungermannia brachyclada Taylor ex Lehm., Synopsis Hepaticarum 2: 247 (1845), *nom. inval.* ≡ **Lepidolaena brachyclada** (Taylor ex Lehm.) Trevis.

Jungermannia brauniana Nees, Enumeratio Plantarum Cryptogamicarum Javae 80 (1830) ≡ **Chiastocaulon braunianum** (Nees) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs

Jungermannia bridelii Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 4: 45 (1832) = **Chiloscyphus semiteres** var. **semiteres**

Original material: Habitat in Nova Hollandia. Specimina vidimus in Herb. Brideliano asservata. Nomen eiat mutandum ob J. canaliculatam Nees ab Esenb.

Jungermannia buccinifera Hook.f. & Taylor, London Journal of Botany 3: 580 (1844) ≡ **Radula buccinifera** (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

Original material: Van Diemen's Land.

Jungermannia cambewarrana Steph., Species Hepaticarum 6: 84 (1917) = **Solenostoma orbiculatum** (Colenso) R.M.Schust.

Original material: Hab. Australia. N. S. Wales (Watts legit).

Jungermannia canaliculata Brid. ex Bonner, Index Hepaticarum 8: 69 (1976), *nom. inval.* = **Chiloscyphus semiteres** var. **semiteres**

Jungermannia capillaris Schwägr., Nova Genera & Species Plantarum seu Prodromus: 144 (1788) = **Kurzia hippurioides** (Hook.f. & Taylor) Grolle

Original material: Jamaica.

The synonymy of *Jungermannia capillaris*, based on a type from Jamaica, with the Australasian *Kurzia hippurioides* is implausible.

Possibly the origins of the type specimen have been confused, or the type material needs to be restudied. The status of this name certainly requires further investigation.

Jungermannia capilligera Schwägr., Historiae muscorum hepaticorum prodromus: 21 (1814) ≡ **Neolepidozia capilligera** (Schwägr.) Fulford & J.Taylor

Jungermannia centipes Taylor ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 2: 204 (1845) ≡ **Ceramanus centipes** (Taylor ex Gotsche, Lindenb. & Nees) E.D.Cooper

Original material: Habitat in Terra van Diemen (Spence in Hb. Grevill.). Specimena nobiscum communicavit amicissimus Taylor (Hb. G.).

Jungermannia ciliigera Hook.f. & Taylor, London Journal of Botany 3: 370 (1844) = **Gottschea pinnatifolia** (Hook.) Nees

Original material: Hab. Lord Auckland's Group; amongst mosses.

Jungermannia cinerascens Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 4: 46 (1832) ≡ **Acrobolbus cinerascens** (Lehm. & Lindenb.) Bastow

Original material: Habitat in Nova Hollandia.

Jungermannia circinalis Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 4: 64 (1832) ≡ **Plagiochila circinalis** (Lehm. & Lindenb.) Lehm. & Lindenb. ex Lindenb.

Original material: In Nova Hollandia.

Jungermannia cladorrhizans Hook.f. & Taylor, London Journal of Botany 3: 570 (1844) = **Podomitrium phyllanthus** (Hook.) Mitt.

Original material: Hab. New Zealand, Mr. Colenso.

Jungermannia clavata Hook.f. & Taylor, London Journal of Botany 4: 88 (1845) ≡ **Frullania clavata** (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

Original material: Hab. Tasmania. On Nephroma cellulosa, Ach.

Jungermannia clavigera Hook., Musci Exotici 1: 70 (1818) ≡ **Lepidolaena clavigera** (Hook.) Dumort. ex Trevis.

Jungermannia coalita Hook., Musci Exotici 2: 123 (1819) ≡ **Heteroscyphus coalitus** (Hook.) Schiffn.

Jungermannia colorata Lehm., Linnaea: ein Journal für die Botanik in ihrem ganzen Umfange, oder Beiträge zur Pflanzenkunde 4: 366 (1829) ≡ **Syzygiella colorata** (Lehm.) Feldberg, Váňa, Hentsche & Heinrichs

Original material: Crescit in vertice montis Teufelsberg et in monle Tafelberg loco auf der Platte dicto. Mense Januario cum fructibus.

Jungermannia combinata Nees, Enumeratio Plantarum Cryptogamicarum Javae: 22 (1830) ≡ **Heteroscyphus combinatus** (Nees) Schiffn.

Jungermannia congesta Hook.f. & Taylor, London Journal of Botany 3: 396 (1844) = **Frullania rostrata** (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees

Original material: Hab. Lord Auckland's group.

Jungermannia conjugata Hook., Musci Exotici 1: 91 (1818) ≡ **Chiastocaulon conjugatum** (Hook.) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs

Jungermannia contigua Nees, Flora Brasiliensis seu Enumeratio Plantarum 1(1): 360 (1833) ≡ **Pycnolejeunea contigua** (Nees) Grolle

Original material: Habitat in Regno Paraensi ad cortices arborum. Var. B. iisdem in locis cum genuinis speciminibus ibidem Martius invenit ; neque non in Provincia Bahiensi et in Minis nd Villam Riccam legit Martius. (V. Var. a, fr. Var. B. cum cal.) In corticis peruviani frustulo legit Frid. Nees ab Esenbech.

Jungermannia contracta var. *novae-hollandiae* Gottsche ex Nees, Synopsis Hepaticarum 1: 79 (1844) = **Cuspidatula monodon** (Taylor ex Lehm.) Steph.

Original material: E Nova Hollandia in Hb. L. et Lg.

Jungermannia cranialis Hook.f. & Taylor, London Journal of Botany 4: 86 (1845)

Original material: Hab. King George's Sound, (Cunningham).

The type material was likely collected at King George Sound, Tasmania, rather than King George's Sound, Western Australia, though Hooker and Taylor can be forgiven their confusion.

Jungermannia crassa Schwägr., Historiae muscorum hepaticorum prodromus: 31 (1814) ≡ **Riccardia crassa** (Schwägr.) Carrington & Pearson

Original material: sine loc, sine leg., W ex herb. Lindenberg 8045, cited as 'isotype' by Hewson (1970b).

Jungermannia cucullata Reinw., Blume & Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12(1): 227 (1824) ≡ **Metalejeunea cucullata** (Reinw., Blume & Nees) Grolle

Original material: Habitat in lava insula ad terram, Blume. V. c. fr.

Jungermannia cucullata var. *tenuis* Nees, Enumeratio Plantarum Cryptogamicarum Javae 57 (1830) ≡ **Drepanolejeunea tenuis** (Nees) J.B.Jack & Steph.

Replaced synonymJungermannia tenuis Reinw., Blume & Nees

Jungermannia cupressina Schwägr., Nova Genera & Species Plantarum seu Prodromus: 144 (1788) ≡ **Lepidozia cupressina** (Schwägr.) Lindenb.

Original material: Jamaica.

Jungermannia curvifolia Dicks., Fasciculus Plantarum Cryptogamicarum Britanniae 2: 15 (1790) ≡ **Nowellia curvifolia** (Dicks.) Mitt.

Jungermannia cymbalifera Hook.f. & Taylor, Flora Antarctica 1(9): 151 (1845) ≡ **Tetracymbaliella cymbalifera** (Hook.f. & Taylor) Grolle

Original material: Hab. Lord Auckland's Group, on the roots of old trees in the woods, rare.

Jungermannia dendroides Nees, Enumeratio Plantarum Cryptogamicarum Javae: 77 (1830) ≡ **Chiastocaulon dendroides** (Nees) Carl

Jungermannia dentata Raddi, Jungermanniografa Etrusca: 21 (1818) = **Cephaloziella dentata** (Raddi) Lindb.

Jungermannia diclados Brid. ex F.Weber, Historiae Muscorum Hepaticorum Prodromus: 56 (1815) ≡ **Mastigophora diclados** (Brid. ex F.Weber) Nees

Jungermannia dilatata L., Species Plantarum 1133 (1753) ≡ **Frullania dilatata** (L.) Dumort.

Jungermannia diplophylla Hook.f. & Taylor, London Journal of Botany 3: 377 (1844) ≡ **Balantiopsis diplophylla** (Hook.f. & Taylor) Mitt.

Original material: Hab. Lord Auckland's Group.

Jungermannia dispar Mont. ex Hook.f. & Taylor, Flora Antarctica 1: 158 (1844) [1845] = **Kurzia hippurioides** (Hook.f. & Taylor) Grolle

Original material: Hab. Lord Auckland's group and Campbell's Island ; on the ground.

Jungermannia divaricata Gottsche, Lindenb. & Nees, Enumeratio Plantarum Cryptogamicarum Javae: 60 (1830), *nom. illeg.* ≡ **Acromastigum divaricatum** (Nees) A.Evans ex Reimers

Jungermannia doellingeri Nees, Synopsis Hepaticarum 1: 104 (1844) ≡ **Chonecolea doellingeri** (Nees) Grolle

Original material: In Brasilia, super truncos, in caespite Octoblephari albidi (Hb. N. ex Hb. Doellinger.). Vidi etiam in Herb. Hampeano, a Siewers e Brasilia adlata specimina.

Jungermannia domestica Gottsche, Linnaea 28: 548 (1856) ≡ **Diplophyllum obtusifolium** subsp. **domesticum** (Gottsche) Váňa

Original material: Habitat in Alpibus (n. 143. 144.) et in Bogang Range, ubi a. 1855 a cel. Müller lecta est.

Jungermannia dubia Nees, Prodromus Florae Norfolkicae: 5 (1833), *nom. illeg.*

Original material: Crescit in insula Norfolk (Ferd. Bauer).

The type of *Jungermannia dubia* was gathered on Norfolk Island, beyond that little is known about this species. The identity of *Jungermannia dubia* needs to be established based on an investigation of the original material. We treat this name as unresolved to reflect the current state of knowledge.

Jungermannia elliptica Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 5: 13 (1833) ≡ **Leptolejeunea elliptica** (Lehm. & Lindenb.) Besch.

Original material: Crescit a in Surinam in foliis Mangiferae indicae L.. B in terris Mexicanis in foliis Chiococcae racemosae L. et Psychotriae marginatae Schwägr. ad Guayaquil in foliis Psychotriae albae R. et P. in Panamae isthmo ad folia Psychotriae fuscatae. Specimina absque nomine var. a communicavit cL Kunze, Prof. Lipsiens., var. B cl Presl, Prof. Pragens.

Jungermannia endlicheriana Nees, Prodromus Florae Norfolkicae: 4 (1833) = **Heteroscyphus argutus** (Reinw., Blume & Nees) Schiffn.

Original material: Crescit in insula Norfolk (Ferd. Bauer)

Jungermannia ericoides Nees, Flora Brasiliensis seu Enumeratio Plantarum 1(1): 346 (1833) ≡ **Frullania ericoides** (Nees) Mont.

Original material: In Morro de Villa Ricca, et ad Mandioccam, in montium Serra dos Orgdos dictorum parte, quae Serra de Estrella audit, et in Minis generalibus, ad arborum cortices. (r. c cal. imperf.)

Jungermannia eriocaula Hook., Musci Exotici 1: 72 (1818) ≡ **Riccardia eriocaula** (Hook.) Besch. & C.Massal.

Original material: Hab. In sinu Dusky Bay dicto, apud Novam Zeelandiam. D.Menzies, 1791.

Jungermannia erosa Reinw., Blume & Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12: 230 (1825) ≡ **Bazzania erosa** (Reinw., Blume & Nees) Trevis.

Original material: Habitat in Monte Bonkak Provinciae Bantam Iavae insulae. Blume, V. s. fr.

Jungermannia exiliflora Taylor, London Journal of Botany 5: 279 (1846) ≡ **Cephaloziella exiliflora** (Taylor) Douin

Original material: Swan River, Mr James Drummond.

Jungermannia exilis Reinw., Blume & Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12(1): 227 (1824) ≡ **Lejeunea exilis** (Reinw., Blume & Nees) Grolle

Original material: not stated [Indonesia: Java].

Jungermannia expansa Lehm., Linnaea: ein Journal für die Botanik in ihrem ganzen Umfange, oder Beiträge zur Pflanzenkunde 4: 361 (1829) ≡ **Leptoscyphus expansus** (Lehm.) Grolle

Original material: Crescit locis humidis in vertice mentis Tafelberg ibidemque in saxis, ut etiam in monte Teufelsberg.

Jungermannia falcata Hook., Musci Exotici 1: 89 (1818) ≡ **Adelanthus falcatus** (Hook.) Mitt.

Original material: Hab. In sinu Dusky Bay dicto, apud Novam Zeelandiam. D. Menzies, 1791.

Jungermannia falciloba Hook.f. & Taylor, London Journal of Botany 3: 581 (1844) = **Frullania falciloba** Taylor ex Lehm.

Original material: Hab. Van Diemen's Land.

Jungermannia fissistipa Hook.f. & Taylor, London Journal of Botany 3: 384 (1844) ≡ **Heteroscyphus fissistipus** (Hook.f. & Taylor) Schiffn.

Original material: Hab. Lord Auckland's group

Jungermannia flabellata Labill., Novae Hollandiae Plantarum Specimen 1(13-14): 109, T. 254 (1806) ≡ **Hymenophyton flabellatum** (Labill.) Dumort. ex Trevis.

Original material: Habitat in capite Van Diemen.

Jungermannia flagellifera Hook., Musci Exotici 1: 59 (1818) ≡ **Dendromastigophora flagellifera** (Hook.) R.M.Schust.

Original material: Hab. In sinu Dusky Bay dicto, apud Novam Zeelandiam. D. Menzies, 1791.

Jungermannia flava Schwägr., Nova Genera & Species Plantarum seu Prodromus: 144 (1788) ≡ **Lejeunea flava** (Schwägr.) Nees

Original material: Jamaica.

Jungermannia floccosa Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 5: 26 (1832) ≡ **Cololejeunea floccosa** (Lehm. & Lindenb.) Steph.

Original material: Habitat in Insula Luzon, ad portum Sorzogon, in foliis arborum. Sine nomine communicavit cl. Prof. Presl.

Jungermannia fragilis Gottsche, Linnaea: ein Journal für die Botanik in ihrem ganzen Umfange, oder Beiträge zur Pflanzenkunde 28: 551 (1856), *nom. illeg.* = **Solenostoma orbiculatum** (Colenso) R.M.Schust.

Jungermannia fruticella Hook.f. & Taylor, London Journal of Botany 3: 565 (1844) ≡ **Dinckleria fruticella** (Hook.f. & Taylor) Heinrichs & J.J.Engel

Jungermannia fugax Hook.f. & Taylor, London Journal of Botany 4: 87 (1845) ≡ **Frullania fugax** (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

Original material: Hab. New Zealand. On *Parmelia reticulata* Taylor.

Jungermannia furcata L., Species Plantarum 2: 1136 (1753) ≡ **Metzgeria furcata** (L.) Dumort.

Original material: Habitat in Europa ad truncos, rupes & e terra.

Jungermannia fusca Lehm., Linnaea: ein Journal für die Botanik in ihrem ganzen Umfange, oder Beiträge zur Pflanzenkunde 4: 360 (1829) ≡ **Mnioloma fuscum** (Lehm.) R.M.Schust.

Original material: Crescit in latere orientali montis Tafelberg.

Jungermannia fuscella Hook.f. & Taylor, London Journal of Botany 3: 373 (1844) ≡ **Plagiochila fuscella** (Hook.f. & Taylor) Taylor & Hook.f. ex Gottsche, Lindenb. & Nees

Original material: Lord Auckland's Group.

Jungermannia glaucophylla Hook.f. & Taylor, London Journal of Botany 3: 580 (1844) ≡ **Lepidozia glaucophylla** (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

Original material: Hab. Van Diemen's Land.

Jungermannia grandiflora Lindenb. & Gottsche, Synopsis Hepaticarum 5: 673 (1847) ≡ **Syzygiella sonderi** (Gottsche) Feldberg, Váňa, Hentsche & Heinrichs

Original material: Habitat prope Valdiviam in regno Cbile , unde attulit cl. Gay (Mont. in Hb. L. et G.).

Jungermannia gregaria Hook.f. & Taylor, London Journal of Botany 3: 564 (1844) ≡ **Plagiochila gregaria** (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

Original material: New Zealand.

Jungermannia hasskarliana (Nees) Mitt., Journal of the Proceedings of the Linnean Society, Botany 5: 90 (1861) ≡ **Solenostoma hasskarliana** (Nees) R.M.Schust. ex Váňa et D.G.Long

Basionym: *Alicularia hasskarliana* Nees

Jungermannia hemicardia Hook.f. & Taylor, London Journal of Botany 3: 371 (1844) = **Plagiochila circinalis** (Lehm. & Lindenb.) Lehm. & Lindenb. ex Lindenb.

Original material: Campbell's Island.

Jungermannia hippurioides Hook.f. & Taylor, London Journal of Botany 3: 387 (1844) ≡ **Kurzia hippurioides** (Hook.f. & Taylor) Grolle

Original material: Hab. Lord Auckland's group. On bark.

Jungermannia hirtella F.Weber, Historiae Muscorum Hepaticorum Prodromus: 50 (1815) ≡ **Plicanthus hirtellus** (F.Weber) R.M.Schust.

Original material: Ex insula St Mauritii. Detexit Boryus. Communicavit absque nomine cel. Bridelius.

Jungermannia horizontalis Hook., Musci Exotici 1: 96 (1818) ≡ **Leptoscyphus horizontalis** (Hook.) Grolle

Jungermannia humilis Hook.f. & Taylor, London Journal of Botany 3: 468 (1844) ≡ **Clasmatocolea humilis** (Hook.f. & Taylor) Grolle

Original material: Hab. Kereguelen's Island.

Jungermannia hutchinsiae Hook., British Jungermanniae 1: pl. 1 (1812) ≡ **Jubula hutchinsiae** (Hook.) Dumort.

Jungermannia hymenophyllum Hook., Musci Exotici 1: 14 (1818) = **Symphyogyna hymenophyllum** (Hook.) Nees et Mont.

Original material: Hab. In sinu Dusky Bay dicto, in Nova Zeelandia. D. Menzies, 1791.

Jungermannia implexicaulis Hook.f. & Taylor, London Journal of Botany 3: 397 (1844) = **Cheilolejeunea mimosa** (Hook.f. & Taylor) R.M.Schust.

Original material: Hab. Campbell's Island.

Jungermannia incompleta Gottsche, Linnaea: ein Journal für die Botanik in ihrem ganzen Umfange, oder Beiträge zur Pflanzenkunde 28: 551 (1856) ≡ **Gymnomitrion incompletum** (Gottsche) R.M.Schust.

Original material: Habitat in Novae Hollandiae Alpibus australibus, ubi casepitem Jungermanniae Sonderi perrepens lecta est. (Specimina incompleta tantum inveni.)

Jungermannia incurvicolla Hook.f. & Taylor, London Journal of Botany 3: 564 (1844) ≡ **Plagiochila incurvicolla** (Hook.f. & Taylor) Taylor & Hook.f. ex Gottsche, Lindenb. & Nees

Original material: New Zealand.

Jungermannia inflexispina Hook.f. & Taylor, London Journal of Botany 4: 82 (1845) ≡ **Clasmatocolea inflexispina** (Hook.f. & Taylor) J.J.Engel

Original material: Hab. King George's Sound, (A. Cunningham).

Jungermannia intortifolia Hook.f. & Taylor, London Journal of Botany 3: 374 (1844) ≡ **Isotachis intortifolia** (Hook.f. & Taylor) Gottsche

Original material: Hab. Campbell's Island.

Jungermannia inundata Hook.f. & Taylor, London Journal of Botany 3: 559 (1844) ≡ **Solenostoma inundatum** (Hook.f. & Taylor) Mitt. ex Steph.

Original material: Hab. in inundated situations, New Zealand.

Jungermannia karsteniana Beauverd, Species Hepaticarum 6: 569 (1924) = **Solenostoma montanum** (Steph.) Váňa

Replaced synonym: Nardia montana Steph.

Jungermannia kiaeri Austin, Bulletin of the Torrey Botanical Club 6(3): 18 (1875) ≡ **Cephaloziella kiaeri** (Austin) Douin

Original material: Africa; with Dicranella Borgeni, Hampe. Communicated by Dr. Frank Kiaer, of Norway.

Jungermannia laevifolia Hook.f. & Taylor, London Journal of Botany 3: 385 (1844) ≡ **Lepidozia laevifolia** (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

Original material: Hab. Campbell's Island.

Jungermannia latitans Hook.f. & Taylor, London Journal of Botany 3: 399 (1844) ≡ **Microlejeunea latitans** (Hook.f. & Taylor) Heinrichs, Schäf.-Verw., Pócs & S.Dong

Original material: Hab. On Jung. uvifera nob. Lord Auckland's Group.

Jungermannia lehmanniana Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 4: 60 (1832) ≡ **Schistochila lehmanniana** (Lindenb.) Carrington & Pearson

Original material: Crescit in terra van Diemen.

Jungermannia lenta Hook.f. & Taylor, London Journal of Botany 3: 379 (1844) ≡ **Chiloscyphus lentus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Original material: Hab. Lord Auckland's Group.

Jungermannia leptantha Hook.f. & Taylor, London Journal of Botany 3: 471 (1844) ≡ **Chiloscyphus leptanthus** (Steph.) J.J.Engel & R.M.Schust.

Original material: Hab. Cape Horn.

Jungermannia leptopoda Hook.f. & Taylor, London Journal of Botany 3: 571 (1844) ≡ **Hymenophyton leptopodum** (Hook.f. & Taylor) A.Evans

Original material: Hab. New Zealand.

Jungermannia leucophylla Hook.f. & Taylor, London Journal of Botany 3: 384 (1844) ≡ **Cryptolophocolea leucophylla** (Hook.f. & Taylor) L.Söderstr.

Original material: Hab. Lord Auckland's Group.

Jungermannia leucoxantha Lehm., Linnea 4: 368 (1829) ≡ **Fossombronia leucoxantha** (Lehm.) Lehm. & Lindenb.

Original material: Crescit ad latus orientale et boreale montis Tafelber, ad radicem montis Teufelsberg et in Monte Löwenschanz humi inter arbuscula.

Jungermannia ligulata Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 6: 139 (1834) ≡ **Thysananthus ligulatus** (Lehm. & Lindenb.) Sukkharak & Gradst.

Original material: Habitat in insula Palu Penang Indiae orient. (Herb. Hookeri.).

Jungermannia longiscypha Taylor, London Journal of Botany 5: 280 (1846) ≡ **Paracromastigum longiscyphum** (Taylor) R.M.Schust. & J.J.Engel

Original material: Hab. Swan River. On sand. Mr. James Drummon, Hook. Herb.

Jungermannia loricata Reinw., Blume & Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12: 233 (1825) ≡ **Bazzania loricata** (Reinw., Blume & Nees) Trevis.

Original material: Habitat in Java insula montosis. Blume.

Jungermannia lumbricoides Nees, Enumeratio Plantarum Cryptogamicarum Javae 40 (1830) ≡ **Lejeunea lumbricoides** (Nees) Nees

Jungermannia lutescens Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 4: 16 (1832) ≡ **Notoscyphus lutescens** (Lehm. & Lindenb.) Mitt.

Original material: Habitat in India orientali.

Jungermannia lyellii Hook., British Jungermanniae 20: npn, Tab. LXXVII (1816) ≡ **Pallavicinia lyellii** (Hook.) Gray

Jungermannia marginata Mitt., Botany of the Antarctic Voyage 3: 222 (1859), *nom. illeg.* = **Clasmatocolea marginata** (Steph.) Grolle

Jungermannia microphylla Hook., Musci Exotici 1: 80 (1818) ≡ **Lepidozia microphylla** (Hook.) Lindenb.

Jungermannia microscopica Taylor, Flora Hibernica 2: 59. 1836. ≡ **Cololejeunea microscopica** (Taylor) Schiffn.

Original material: On Hypnum loreum, on a loosely crespitose bank in the wood at Gortagarree, near Killarney.

Jungermannia mimosa Hook.f. & Taylor, London Journal of Botany 3: 398 (1844) ≡ **Cheilolejeunea mimosa** (Hook.f. & Taylor) R.M.Schust.

Original material: Hab. Lord Auckland's group.

Jungermannia minutissima Sm., English Botany 23: 1633, pl. (1806) ≡ **Myriocoleopsis minutissima** (Sm.) R.L.Zhu, Y.Yu & Pócs

Jungermannia mollissima Hook.f. & Taylor, London Journal of Botany 3: 390 (1844) ≡ **Trichocolea mollissima** (Hook.f. & Taylor) Gottsche

Original material: Hab. Lord Auckland's Group.

Jungermannia monilinervis Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 4: 56 (1832) ≡ **Bazzania monilinervis** (Lehm. & Lindenb.) Trevis.

Original material: Habitat in Monte Bonkak Provinciae Bantam Iavae insulae. Blume. V. s. fr.

Jungermannia monocera Hook.f. & Taylor, London Journal of Botany 4: 89 (1845) ≡ **Frullania monocera** (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

Original material: Hab. Van Diemen's Land. Growing among patches of Jungermanniae.

Jungermannia monodon Taylor ex Lehm., Novarum et Minus Cognitarum Stirpium Pugillus 8: 7 (1844) ≡ **Cuspidatula monodon** (Taylor ex Lehm.) Steph.

Original material: Crescit in Terra van Diemen caespites densos formans, attulit Dr. Spence 1824. (Hb. Greville et Taylor.)

Jungermannia monodon var. *fraseri* Gottsche, Fragmenta Phytographiae Australiae 11(Suppl.): 53 (1880), *nom. illeg.* = **Cuspidatula monodon** (Taylor ex Lehm.) Steph.

Jungermannia monodon var. *muelleri* Gottsche, Linnaea: ein Journal für die Botanik in ihrem ganzen Umfange, oder Beiträge zur Pflanzenkunde 28: 549 (1856) = **Cuspidatula monodon** (Taylor ex Lehm.) Steph.

Original material: In caespite cum Matigobryo Novae Hollandiae crescentem legit in Sealers Cove (no. 117.) a.1854 cel. Muller

Jungermannia multifida L., Species Plantarum 2: 1136 (1753) ≡ **Riccardia multifida** (L.) Gray

Original material: Habitat in Angliae ericetis.

Jungermannia multipenna Hook.f. & Taylor, London Journal of Botany 4: 81 (1845), *nom. illeg.* ≡ **Cryptolophocolea pallida** (Mitt.) L.Söderstr.

Original material: Hab. Lord Auckland's Group

Jungermannia multipenna Hook.f. & Taylor, London Journal of Botany 3: 381 (1844) ≡ **Isotachis intortifolia** (Hook.f. & Taylor) Gottsche

Jungermannia muricata Lehm., Linnaea: ein Journal für die Botanik in ihrem ganzen Umfange, oder Beiträge zur Pflanzenkunde 4: 363 (1829) ≡ **Chiloscyphus muricatus** (Lehm.) J.J.Engel & R.M.Schust.

Original material: Crescit in parietibus saxorum in vertice montis Tafelberg.

Jungermannia nitida F.Weber, Historiae Muscorum Hepaticorum Prodromus: 43 (1815) ≡ **Bazzania nitida** (F.Weber) Grolle

Jungermannia nodulosa Reinw., Blume & Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12(1): 217, 415 (1824) ≡ **Frullania nodulosa** (Reinw., Blume & Nees) Nees

Original material: Habitat in monte Lebock Proviuciae Bantam lavae insulae , versus meridiem et orientem, ad arborum cortices. Blume. V. c. cal.

Jungermannia notophylla Hook.f. & Taylor, London Journal of Botany 3: 376 (1844) ≡ **Clasmatocolea notophylla** (Hook.f. & Taylor) Grolle

Original material: Hab. Lord Auckland's Group.

Jungermannia novae-hollandiae Nees ex Hook.f. & Taylor, Flora Antarctica 1: 159 (1844) [1845] = **Bazzania adnexa** (Lehm. & Lindenb.) Trevis.

Original material: Hab. Lord Auckland's group ; common in the woods, creeping amongst mosses and other Hepaticae.

Jungermannia novae-zeelandiae Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 6: 33 (1834) ≡ **Chiloscyphus novae-zeelandiae** (Lehm. & Lindenb.) J.J.Engel & R.M.Schust.

Original material: Habitat in portam Dusky Bay Novae Zeelandiae (Herb. Hookeri).

Published as 'novae zeelandiae', correctable to 'novae-zeelandiae' in accordance with Art. 60.11.

Jungermannia nudipes Hook.f. & Taylor, London Journal of Botany 3: 568 (1844) ≡ **Siphonolejeunea nudipes** (Hook.f. & Taylor) Herzog

Jungermannia obliquifolia (Schiffn.) Váňa, Journal of the Hattori Botanical Laboratory 36: 68 (1972) ≡ **Solenostoma obliquifolium** (Schiffn.) R.M.Schust. ex Váňa, Hentschel & Heinrichs

Basionym: *Nardia obliquifolia* Schiffn.

Jungermannia oblongifolia Hook.f. & Taylor, London Journal of Botany 3: 563 (1844) ≡ **Heteroscyphus oblongifolius** (Hook.f. & Taylor) Schiffn.

Original material: Hab. New Zealand.

Jungermannia obovata Hook.f. & Taylor, London Journal of Botany 3: 581 (1844) = **Symphyogyna podophylla** (Thunb.) Mont. & Nees

Original material: Hab. Van Diemen's Land.

Jungermannia obtusifolia Hook., British Jungermanniae 7: pl. 26 (1812) ≡ **Diplophyllum obtusifolium** (Hook.) Dumort.

Original material: Hab. Near Heddon on the Wall, Northumberland. Mr. Thornhill. - Very rare in Ireland, where Miss Hutchins has discovered it only in one spot, near Bantry.

Jungermannia occlusa Hook.f. & Taylor, London Journal of Botany 3: 369 (1844) ≡ **Adelanthus occlusus** (Hook.f. & Taylor) Carrington

Original material: Hab. Campbell's Island.

Jungermannia ochrophylla Hook.f. & Taylor, London Journal of Botany 3: 368 (1844) ≡ **Acrobolbus ochrophyllus** (Hook.f. & Taylor) R.M.Schust.

Original material: Hab. Lord Auckland's Group.

Jungermannia opisthotona Hook.f. & Taylor, London Journal of Botany 3: 577 (1844) = **Plagiochila retrospectans** Nees

Original material: Van Diemen's Land.

Jungermannia opposita Reinw., Blume & Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12(1): 236 (1824) ≡ **Chiastocaulon oppositum** (Reinw., Blume & Nees) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs

Jungermannia pallidovirens Hook.f. & Taylor, Hepaticae Antarcticae. London Journal of Botany 3: 473 (1844) ≡ **Cryptolophocolea pallidovirens** (Hook.f. & Taylor) L.Söderstr.

Jungermannia palpebrifolia Hook., Musci Exotici 1: 71 (1818) ≡ **Lepidolaena palpebrifolia** (Hook.) Dumort. ex Trevis.

Jungermannia pansa Taylor, London Journal of Botany 5: 275 (1846) ≡ **Lethocolea pansa** (Taylor) G.A.M.Scott & K.G.Beckm.

Original material: Hab. On clay, Swan River. Mr. James Drummond.

Jungermannia patentissima Hook.f. & Taylor, London Journal of Botany 3: 386 (1844) ≡ **Neolepidozia patentissima** (Hook.f. & Taylor) E.D.Cooper

Original material: Hab. Lord Auckland's group.

Jungermannia pendulina Hook., Musci Exotici 1: 60 (1818) ≡ **Lepidozia pendulina** (Hook.) Lindenb.

Jungermannia perigonialis Hook.f. & Taylor, London Journal of Botany 3: 368 (1844) ≡ **Andrewsianthus perigonialis** (Hook.f. & Taylor) R.M.Schust.

Original material: Hab. Lord Auckland's group.

Jungermannia perpusilla Hook.f. & Taylor, Hooker's Journal of Botany and Kew Garden Miscellany 3: 380 (1844) ≡ **Chiloscyphus perpusillus** (Hook.f. & Taylor) J.J.Engel

Original material: Hab. Campbell's Island.

Jungermannia phyllanthus Hook., Musci Exotici 1: 95 (1818) ≡ **Podomitrium phyllanthus** (Hook.) Mitt.

Original material: Hab. In sinu Dusky bay dicto, in Nova Zeelandia. D. Menzies, 1791.

Jungermannia physantha Hook.f. & Taylor, London Journal of Botany 3: 561 (1844) ≡ **Leptoscyphus physanthus** (Hook.f. & Taylor) J.J.Engel

Original material: Hab. New Zealand.

Jungermannia piligera Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12(1): 414 (1824) ≡ **Anastrophyllum piligerum** (Nees) Steph.

Original material: Habitat in lava insula ad terram. Blume. V. c. cal.

Jungermannia pinnatifolia Hook., Musci Exotici 2: 114 (1819) ≡ **Gottschea pinnatifolia** (Hook.) Nees

Original material: Dusky Bay, Menzies, 1971.

Jungermannia planiuscula Hook.f. & Taylor, London Journal of Botany 3: 382 (1844) ≡ **Heteroscyphus planiusculus** (Hook.f. & Taylor) J.J.Engel

Original material: Hab. Lord Auckland's Group.

Jungermannia pleurata Hook.f. & Taylor, London Journal of Botany 3: 372 (1844) ≡ **Dinckleria pleurata** (Hook.f. & Taylor) Trevis.

Jungermannia plicatiloba Hook.f. & Taylor, London Journal of Botany 4: 92 (1845) ≡ **Diplasiolejeunea plicatiloba** (Hook.f. & Taylor) Grolle

Original material: Hab. Lord Auckland's Group, on Parmelia intestiniformis Ach.

Jungermannia pluma Reinw., Blume & Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12(1): 209 (1824) ≡ **Trichocolea pluma** (Reinw., Blume & Nees) Mont.

Original material: Habitat in montibus Parangkudjang Provinciae Bantam Iavae insulae. Blume. V. s. fr.

Jungermannia podophylla Thunb., Prodromus Plantarum Capensium 2: 174 (1800) ≡ **Symphyogyna podophylla** (Thunb.) Mont. & Nees

Original material: None cited.

Jungermannia polyacantha Hook.f. & Taylor, London Journal of Botany 3: 390 (1844) ≡ **Eotrichocolea polyacantha** (Hook.f. & Taylor) R.M.Schust.

Original material: Hab. Lord Auckland's Group.

Jungermannia polyanthos L., Species Plantarum 2: 1131 (1753) ≡ **Chiloscyphus polyanthos** (L.) Corda

Jungermannia praenitens Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 6: 27 (1834) ≡ **Neolepidozia praenitens** (Lehm. & Lindenb.) E.D.Cooper

Original material: Habitat in Nova Zeelandia ad portum Dusky Bay dictum. (Herb. Hookeri.).

Jungermannia prehensilis Hook.f. & Taylor, London Journal of Botany 3: 480 (1844) ≡ **Riccardia prehensilis** (Hook.f. & Taylor) C.Massal.

Original material: Hab. Hermite Island. Cape Horn.

Jungermannia primordialis Hook.f. & Taylor, London Journal of Botany 4: 92 (1845) ≡ **Lejeunea primordialis** (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

Original material: Hab. Lord Auckland's Group. On Sticta flava, Tayl.

Jungermannia pulchella Hook., Musci Exotici 1: 94 (1818) ≡ **Temnoma pulchellum** (Hook.) Mitt. ex Bastow

Jungermannia punicea Nees, Enumeratio Plantarum Cryptogamicarum Javae: 32 (1830) ≡ **Andrewsianthus puniceus** (Nees) R.M.Schust. ex Grolle

Jungermannia pusilla L., Species Plantarum 2: 1136 (1753) ≡ **Fossombronia pusilla** (L.) Nees

Original material: Habitat in Europae rupibus, ericetis humentibus.

Jungermannia pycnantha Hook.f. & Taylor, London Journal of Botany 3: 566 (1844) ≡ **Frullania pycnantha** (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

Original material: Habitat in Nova Zeelandia.

Jungermannia quadrifida Mitt., Flora Novae-Zelandiae 2(6): 128 (1854) ≡ **Temnoma quadrifidum** (Mitt.) Mitt. ex E.A.Hodgs. & Allison

Original material: Hab. Northern Island : Patea village ; creeping on the earth with Marchantia macropora (Mitten), Colenso.

Jungermannia quadripartita Hook., Musci Exotici 2: pl. 117 (1819) ≡ **Temnoma quadripartitum** (Hook.) Mitt.

Original material: Hab. In insula Staten Land dicta, prope Cape Horn. D. Menzies, 1787.

Jungermannia ramosissima Hook., Musci Exotici 1: 92 (1818) ≡ **Plagiochila ramosissima** (Hook.) Lindenb.

Original material: Hab. in sinu Dusky bay dicto, apud Novam Zeelandiam, D. Menzies, 1791.

Jungermannia reflexistipula Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 5: 10 (1833) ≡ **Lejeunea reflexistipula** (Lehm. & Lindenb.) Lehm. & Lindenb. ex Gottsche, Lindenb. & Nees

Original material: Habitat in Brasilia, Inter muscos in Serra de Estrella lectam communicavit cl. Beyrich.

Jungermannia renitens Nees, Enumeratio Plantarum Cryptogamicarum Javae: 76 (1830) ≡ **Plagiochila renitens** (Nees) Lindenb.

Original material: in Java insula. (Blume et Reinwardt.).

Jungermannia repleta Hook.f. & Taylor, London Journal of Botany 5: 557 (1844) ≡ **Schistochila repleta** (Hook.f. & Taylor) Steph.

Original material: Hab. New Zealand, Mr Colenso.

Jungermannia reticulata Hook.f. & Taylor, London Journal of Botany 3: 395 (1844) ≡ **Lepidolaena reticulata** (Hook.f. & Taylor) Trevis.

Original material: Hab. Lord Auckland's group.

Jungermannia retrospectans Nees, Systema Vegetabilium Edn. 17, 4(2): 325 (1827) = **Heteroscyphus argutus** (Reinw., Blume & Nees) Schiffn.

Original material: Nov. Holl.

Jungermannia retrospectans Nees, Berichtigungen zur Enumeratio plantarum cryptogamicarum Javae. Linnaea: ein Journal für die Botanik in ihrem ganzen Umfange, oder Beiträge zur Pflanzenkunde 6: 619 (1831), *nom. illeg.* = **Plagiochila retrospectans** Nees

Original material: Crescit in Nova Hallandia, Sieber.

Jungermannia retusa Reinw., Blume & Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12(1): 214 (1824) ≡ **Thysananthus retusus** (Reinw., Blume & Nees) B.M.Thiers & Gradst.

Original material: Habitat inter muscos Iavae insulae. Blume. V. s. fr.

Jungermannia revolvens Hook.f. & Taylor, London Journal of Botany 5: 275 (1846) = **Syzygiella tasmanica** (Hook.f. & Taylor) K.Feldberg, Váňa, Hentschel & Heinrichs

Original material: Hab. Van Diemen's Land. Gunn Hook Herb.

Jungermannia rhizobola Schwägr., Historiae muscorum hepaticorum prodromus: 31 (1814) = **Symphyogyna podophylla** (Thunb.) Mont. & Nees

Jungermannia rhodina Hook.f. & Taylor, London Journal of Botany 4: 93 (1845) ≡ **Symphyogyna rhodina** (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

Original material: Hab. Van Diemen's Land. (Dr. Lyall.).

Jungermannia rigens Hook.f. & Taylor, London Journal of Botany 3: 461 (1844) ≡ **Clasmatocolea rigens** (Hook.f. & Taylor) J.J.Engel

Original material: Hab. Falkland Islands.

Jungermannia rivalis Hook.f. & Taylor, London Journal of Botany 3: 469 (1844) ≡ **Chiloscyphus sabuletorum** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Original material: Hab. Port Louis, Falkland Islands.

Jungermannia rostrata Hook.f. & Taylor, London Journal of Botany 4: 87 (1845) ≡ **Frullania rostrata** (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees

Original material: Hab. Lord Auckland's group. On Parmelia enteromorpha Ach.

Jungermannia rotata Hook.f. & Taylor, London Journal of Botany 3: 560 (1844) ≡ **Hepatostolonophora rotata** (Hook.f. & Taylor) J.J.Engel

Original material: Hab. New Zealand.

Jungermannia sabuletorum Hook.f. & Taylor, London Journal of Botany 3: 469 (1884) ≡ **Chiloscyphus sabuletorum** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Original material: Hab. Falkland Islands.

Jungermannia saccata Hook., Musci Exotici 1: 16 (1818) ≡ **Acrobolbus saccatus** (Hook.) Trevis.

Original material: Dusky Bay, 1791, Menzies.

Jungermannia scariosa Lehm., Linnaea 4: 365 (1829) ≡ **Gongylanthus scariosus** (Lehm.) Steph.

Original material: Crescit in monte Lowenschwanz et in sylva quercina montis Teufelsberg ad terram.

Jungermannia schismoides Mont., Annales des Sciences Naturelles; Botanique 19: 250 (1843) ≡ **Anastrophyllopsis subcomplicata** (Lehm. & Lindenb.) Váňa & L.Söderstr.

Original material: Hab. cum Herpetio involuto Nob. et Mastigophorâ fiiamenlosa L. L. inter caules Oncophori dichotomi in insulis Auckland à cl. Hombron lecta.

Jungermannia scolopendra Hook., Musci Exotici 1: 40 (1818) ≡ **Lepicolea scolopendra** (Hook.) Dumort. ex Trevis.

Jungermannia sect. *Cephalozia* Dumort., Sylloge Jungermannidearum Europae Indigenarum 60 (1831) ≡ **Cephalozia** (Dumort.) Dumort.

Jungermannia sect. *Colura* Dumort., Sylloge Jungermannidearum Europae indigenarum: 32 (1831) ≡ **Colura** (Dumort.) Dumort.

Jungermannia sect. *Diplophyllum* Dumort., Sylloge Jungermannidearum Europae indigenarum: 44 (1831) ≡ **Diplophyllum** (Dumort.) Dumort.

Jungermannia sect. *Lophozia* Dumort., Sylloge Jungermannidearum Europae indigenarum: 53 (1831) ≡ **Lophozia** (Dumort.) Dumort.

Jungermannia securifolia Nees, Prodromus Florae Norfolkicae: 5 (1833) ≡ **Acrolejeunea securifolia** (Nees) Steph. & Watts

Original material: Crescit in insula Norfolk (Ferd. Bauer).

Jungermannia semirepanda Nees, Enumeratio Plantarum Cryptogamicarum Javae: 39 (1830) ≡ **Spruceanthus semirepandus** (Nees) Verd.

Jungermannia semiteres Lehm., Linnaea: ein Journal für die Botanik in ihrem ganzen Umfange, oder Beiträge zur Pflanzenkunde 4: 363 (1829) ≡ **Chiloscyphus semiteres** (Lehm. & Lindenb.) Lehm. & Lindenb.

Original material: Crescit prope cataraclam in latere orientali mentis Teufelsberg.

Jungermannia serpentina Nees, Enumeratio Plantarum Cryptogamicarum Javae: 62 (1830) = **Bazzania serpentina** (Nees) Trevis.

Jungermannia sinuosa Hook., Musci Exotici 2: 113 (1819) ≡ **Heteroscyphus sinuosus** (Hook.) Schiffn.

Jungermannia sonderi Gottsche, Linnaea: ein Journal für die Botanik in ihrem ganzen Umfange, oder Beiträge zur Pflanzenkunde 28: 550 (1856) = **Syzygiella sonderi** (Gottsche) Feldberg, Váňa, Hentsche & Heinrichs

Original material: Lecta est in alpibus australibus.

Jungermannia sordida Nees, Enumeratio Plantarum Cryptogamicarum Javae: 41 (1830) ≡ **Lejeunea sordida** (Nees) Mont.

Jungermannia spathulistipa Reinw., Blume & Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12(1): 212 (1824) ≡ **Thysananthus spathulistipus** (Reinw., Blume & Nees) Lindenb.

Original material: Habitat in montibus (v. c. in Monte Leback) Provinciae Bantam Iavae insulae. Blume. V. c. cal.

Jungermannia splendens Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 4: 22 (1832) ≡ **Heteroscyphus splendens** (Lehm. & Lindenb.) Grolle

Original material: Paucula specimina cum J. diclado juncta invenimus.

Jungermannia squarrosa Reinw., Blume & Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12(1): 219 (1824), *nom. illeg.* = **Frullania ericoides** (Nees) Mont.

Original material: Habitat in arborum cortice Iavae insulae. Blume. V. s. fr.

Jungermannia squarrosa Reinw., Blume & Nees is a later homonym of *Jungermannia squarrosa* Menzies ex Hook.

Jungermannia squarrosa Menzies ex Hook., Musci Exotici 1: 78 (1818) ≡ **Chandonanthus squarrosus** (Menzies ex Hook.) Mitt.

Original material: Hab. In sinu Dusky Bay dicto. D. Menzies 1787.

Jungermannia squarrosula Taylor, London Journal of Botany 5: 277 (1846), *nom. illeg.* ≡ **Cephaloziella squarrosula** Steph.

Original material: Hab. No. 54. On charcoal. Swan River; Mr. James Drummond.

Jungermannia squarrosula Taylor is a later homonym of *Jungermannia squarrosula* Hook.f. & Taylor.

Jungermannia squarrosula Hook.f. & Taylor, London Journal of Botany 4: 88 (1845) ≡ **Frullania squarrosula** (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

Original material: Hab. New Zealand. On lichens.

Jungermannia striata Lehm., Novarum et Minus Cognitarum Stirpium Pugillus 4: 16 (1832) ≡ **Ptychanthus striatus** (Lehm. & Lindenb.) Nees

Original material: Habitat in Nepalia

Jungermannia strombifolia Hook.f. & Taylor, London Journal of Botany 3: 578 (1844) ≡ **Plagiochila strombifolia** Taylor ex Lehm.

Original material: Van Diemen's Land/

Jungermannia strongylophylla Hook.f. & Taylor, London Journal of Botany 3: 370 (1844) ≡ **Clasmatocolea strongylophylla** (Hook.f. & Taylor) Grolle

Original material: Hab. Campbell's Island and, Beta., Lord Auckland's Group

Jungermannia stygia Hook.f. & Taylor, London Journal of Botany 3: 367 (1844) = **Andrewsianthus perigonialis** (Hook.f. & Taylor) R.M.Schust.

Original material: Hab. Campbell's Island.

Jungermannia subcomplicata Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 7: 4 (1838) ≡ **Anastrophyllopsis subcomplicata** (Lehm. & Lindenb.) Váňa & L.Söderstr.

Original material: Habitat in insulis Marianis. Specimina benevole communicavit Dr. G. Bongard, Professor Petropolitanus celeberrimus.

Jungermannia subfusca Nees, Enumeratio Plantarum Cryptogamicarum Javae: 36 (1830) ≡ **Lopholejeunea subfusca** (Nees) Schiffn.

Jungermannia subg. *Anastrophyllum* Spruce, Journal of Botany, British and Foreign 14: 234 (1876) ≡ **Anastrophyllum** (Spruce) Steph.

Jungermannia subg. *Jamesoniella* Spruce, Journal of Botany, British and Foreign 14: 202 (1876) ≡ **Syzygiella** Spruce

Jungermannia subg. *Zoopsis* Hook.f. & Taylor, Flora Antarctica 1: 167 (1845) ≡ **Zoopsis** (Hook.f. & Taylor) Hook.f. ex Gottsche, Lindenb. & Nees

Jungermannia subtrifida Hook.f. & Taylor, London Journal of Botany 3: 579 (1844) ≡ **Triandrophyllum subtrifidum** (Hook.f. & Taylor) Fulford & Hatcher

Original material: Hab. Van Diemen's Land.

Jungermannia subviridis Hook.f. & Taylor, London Journal of Botany 3: 473. 1844 ≡ **Chiloscyphus subviridis** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Jungermannia tasmanica Hook.f. & Taylor, London Journal of Botany 5: 274 (1846) ≡ **Syzygiella tasmanica** (Hook.f. & Taylor) K.Feldberg, Váňa, Hentschel & Heinrichs

Original material: Hab. With Scapania Urvilleana, Mont. n. 53. Van Diemens Land. Gunn, 1844. Hook. Herb.

Jungermannia tenax Grev., Annals of the Lyceum of Natural History of New York 1: 277 (1825) ≡ **Kurzia tenax** (Grev.) Grolle

Original material: Hab. In Nova Hollandia lecta, communicavit, D. Fraser.

Jungermannia tenella (Taylor ex Lehm.) Hook.f. & Taylor, London Journal of Botany 3: 377 (1844) ≡ **Acrobolbus tenellus** (Taylor ex Lehm.) Trevis.

Basionym: *Gymnanthe tenella* Taylor ex Lehm.

Jungermannia tenuis Reinw., Blume & Nees, Nova Acta Physico-Medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes

Historias et Experimenta 12(1): 226 (1824), *nom. illeg.*, *non* Ehrh. (1789). = **Drepanolejeunea tenuis** (Nees) J.B.Jack & Steph.

Jungermannia teres Carrington & Pearson, Papers and Proceedings of the Royal Society of Tasmania 1887: 9 (1888) ≡ **Herzogobryum teres** (Carrington & Pearson) Grolle

Original material: Hab., near top of Mount Wellington, December 25th, 1885. 275.

Jungermannia tetradactyla Hook.f. & Taylor, London Journal of Botany 3: 386 (1844) ≡ **Neolepidozia tetradactyla** (Hook.f. & Taylor) Fulford & J.Taylor

Original material: Hab. Lord Auckland's Group, on Jung. coalita Hook.

Jungermannia tetragona Lindenb. Botanische Zeitung (Berlin) 6: 462 (1848) ≡ **Solenostoma tetragona** (Lindenb.) R.M. Schust. ex Váňa & D.G.Long

Original material: in Java collegit Zollingerus

Jungermannia textilis Hook.f. & Taylor, London Journal of Botany 3: 468 (1844) ≡ **Chiloscyphus textilis** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Original material: Hab. Falkland Islands.

Jungermannia thymifolia Nees, Enumeratio Plantarum Cryptogamicarum Javae: 42 (1830) = **Lejeunea flava** subsp. **flava**

Jungermannia thymifolia var. *imbricata* Nees, Enumeratio plantarum cryptogamicarum Javae: 42. 1830 ≡ **Cheilolejeunea trapezia** (Nees) Kachroo & R.M.Schust.

Jungermannia tomentella var. *javanica* Reinw., Blume & Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12(1): 208 (1824) = **Trichocolea mollissima** (Hook.f. & Taylor) Gottsche

Original material: Habitat in Iava insula frequens inter muscos ad terram. Blume. V. s. fr. completa.

Unlikely to be a synonym of *Trichocolea mollissima*; more likely a synonym of *T. pluma*, though this requires confirmation based on examination of the type.

Jungermannia trapezia Nees, Enumeratio Plantarum Cryptogamicarum Javae: 40 (1830) ≡ **Cheilolejeunea trapezia** (Nees) Kachroo & R.M.Schust.

Jungermannia triacantha Hook.f. & Lev., Choix de Plantes de la Nouvelle-Zelande: 8 (1846) ≡ **Heteroscyphus triacanthus** (Hook.f. & Taylor) Schiffn.

Jungermannia tridactylis Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 4: 41 (1832) ≡ **Neolepidozia tridactylis** (Lehm. et Lindenb.) E.D.Cooper

Original material: Habitat in Nova Hollandia.

Jungermannia tridens Reinw., Blume & Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12(1): 228 (1824) ≡ **Bazzania tridens** (Reinw., Blume & Nees) Trevis.

Original material: Habitat in terra nuda et inter muscos lavae iasulae. Blume.

Jungermannia trifaria Reinw., Blume & Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12(1): 226 (1824) ≡ **Cheilolejeunea trifaria** (Reinw., Blume & Nees) Mizut.

Original material: Habitat ad terram, caespitosa. Blume. V. c. cal.

Jungermannia truncata Nees, Enumeratio Plantarum Cryptogamicarum Javae: 29 (1830) ≡ **Solenostoma truncatum** (Nees) R.M.Schust. ex Váňa & D.G.Long

Jungermannia tuloides Hook.f. & Taylor, London Journal of Botany 3: 558 (1844) ≡ **Gottschea tuloides** (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

Original material: Hab. New Zealand. Mr Colenso.

Jungermannia turgescens Hook.f. & Taylor, London Journal of Botany 3: 375 (1844) = **Clasmatocolea strongylophylla** (Hook.f. & Taylor) Grolle

Original material: Hab. Lord Auckland's Group.

Jungermannia ulicina Taylor, Transactions of the Botanical Society of Edinburgh 1: 115 (1844) ≡ **Microlejeunea ulicina** (Taylor) Steph.

Original material: River Finnehy, near Kenmare, county of Kerry', 'at Dolgelly, North Wales'

Jungermannia ulothrix Schwägr., Historiae muscorum hepaticorum prodromus: 21 (1814) ≡ **Lepidozia ulothrix** (Schwägr.) Lindenb.

Jungermannia uncigera Reinw., Blume & Nees, Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 12(1): 230 (1825) ≡ **Bazzania uncigera** (Reinw., Blume & Nees) Trevis.

Original material: Habitat inter muscos lavae insulae. Blume.

Jungermannia unguiculata Hook.f. & Taylor, London Journal of Botany 5: 279 (1846) ≡ **Goebelobryum unguiculatum** (Hook.f. & Taylor) Grolle

Original material: Hab. Near sulphur springs, New Zealand. On tufts of Musci ; n. 258. 1844. Hook. Herb.

Jungermannia varians Gottsche, Die Internationale Polarforschung 1882--1883, Die Deutschen Expeditionen und ihre Ergebnisse 2: 452, pl. 7, f. 1–2 (1890) ≡ **Cephaloziella varians** (Gottsche) Steph.

Jungermannia vermicularis Lehm., Linnaea: ein Journal für die Botanik in ihrem ganzen Umfange, oder Beiträge zur Pflanzenkunde 4: 361 (1829) ≡ **Clasmatocolea vermicularis** (Lehm.) Grolle

Jungermannia wallichiana Lehm., Novarum et Minus Cognitarum Stirpium Pugillus 3: 5 (1831) ≡ **Microlejeunea wallichiana** (Lehm.) R.L.Zhu & Y.M.Wei

Original material: None cited.

Jungermannia wattsiana Steph., Species Hepaticarum 6: 96 (1917) = **Solenostoma montanum** (Steph.) Váňa

Original material: Hab. Australia. New-South Wales. (Watts legit).

Jungermannia whiteleggei Carrington & Pearson, Proceedings of the Linnean Society of New South Wales, Series 2 2: 1051 (1888) ≡ **Chaetophyllopsis whiteleggei** (Carrington & Pearson) R.M.Schust.

Original material: None cited, but published in a treatment of liverworts collected by Mr Whitelegge in New South Wales.

Jungermannia wondraczekii Corda, Deutschlands Flora in Abbildungen nach der Natur mit Beschreibungen 2(19,20): 30 (1830) ≡ **Fossombronia wondraczekii** (Corda) Dumort. ex Lindb.

Jungermannia xanthocarpa Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 5: 8 (1833) ≡ **Cheilolejeunea xanthocarpa** (Lehm. & Lindenb.) Malombe

Jungermannia xiphoides Hook.f. & Taylor, London Journal of Botany 3: 569 (1844) ≡ **Pallavicinia xiphoides** (Hook.f. & Taylor) Trevis.

Original material: Hab. New Zealand.

Kantius sphagnicola Arnell & J.Perss., Revue Bryologique 29: 26 (1902) ≡ **Calypogeia sphagnicola** (Arnell & J.Perss.) Warnst. & Loeske

Original material: Hab. Suecia, prov. Dalarne, par. Mora, in Sphagnis intermixta et Myliae anomalae associata, ubi ab J. Persson 20 Augusto 1890 lectum ut et in prov. Skane, ad Horby, in sphagneto repens, Junio 1901 (J, Persson).

Kurzia G.Martens, Flora: oder Allgemeine Botanischer Zeitung 53: 417 (1870)

Kurzia brevicalycina (Steph.) Grolle, Revue Bryologique et Lichenologique 32: 175 (1964)

Basionym: *Lepidozia brevicalycina* Steph.

Kurzia calcarata (Steph.) Grolle, Revue Bryologique et Lichenologique 32: 178 (1964)

Basionym: *Lepidozia calcarata* Steph.

#Kurzia compacta (Steph.) Grolle, Revue Bryologique et Lichenologique 32: 178 (1964)

Basionym: *Lepidozia compacta* Steph.

Kurzia compacta is the most commonly applied species name to Australian *Kurzia*, with numerous records from Tasmania, Western Australia, Victoria and New South Wales. However, *Kurzia compacta* is endemic to New Zealand according to Engel & Glenny (2008). The status of the many Australian specimens determined as *Kurzia compacta* therefore requires further investigation.

Kurzia cucullifolia (Steph.) R.M.Schust., Journal of the Hattori Botanical Laboratory 48: 350 (1980)

Basionym: *Lepidozia cucullifolia* Steph.

The status of *Kurzia cucullifolia* requires further investigation. The type is Patagonian, and the presence of plants in Australia that match the type needs to be confirmed. The status of *Kurzia cucullifolia* is doubtful according to Engel (1978).

Kurzia dendroides (Carrington & Pearson) Grolle, Revue Bryologique et Lichenologique 32: 175 (1964)

Basionym: *Lembidium dendroides* Carrington & Pearson

Kurzia fragilifolia R.M.Schust., Journal of the Hattori Botanical Laboratory 48: 364 (1980) ≡ **Telaranea fragilifolia** (R.M.Schust.) J.J.Engel & G.L.Merr.

Original material: New Zealand: Little Barrier, on summit track to Mt Hauturu, SE of summit of Mt. HereKohu, 1700–1900 ft, *Schuster 57896*.

Kurzia hippurioides (Hook.f. & Taylor) Grolle, Revue Bryologique et Lichenologique 32: 178 (1964)

Basionym: *Jungermannia hippurioides* Hook.f. & Taylor

Kurzia lateconica (Steph.) Grolle, Revue Bryologique et Lichenologique 32: 175 (1964)

Basionym: *Lepidozia lateconica* Steph.

Kurzia pallescens Grolle, Revue Bryologique et Lichenologique 32: 177 (1964)

Original material: New Zealand: North Island: NW Ruahines, Otupae Station, 1948, *Druce* (MPN ex herb Hodgson 8223).

Kurzia quadriseta Grolle, Revue Bryologique et Lichenologique 32: 175 (1964) = **Kurzia pallescens** Grolle

Original material: Tasmania: Williamsford, near Mt Read, *Weymouth 5755*.

Kurzia quadriseta var. *trilobata* R.M.Schust., Journal of the Hattori Botanical Laboratory 48: 363 (1980) ≡ **Kurzia trilobata** (R.M.Schust.) R.M.Schust.

Original material: New Zealand: North Island: Soda Springs, head of Mangatepopo Stream, ca. 4500 ft, near saddle between Mts. Ngauruboe and Tongariro, Tongariro Natl. Park (RMS 5110a).

Kurzia reversa (Carrington & Pearson) Grolle, Revue Bryologique et Lichenologique 32: 175 (1964)

Basionym: *Lepidozia reversa* Carrington & Pearson

Kurzia saddlensis (Besch. & C.Massal.) Grolle, Revue Bryologique et Lichenologique 32: 174 (1964)

Basionym: *Lepidozia saddlensis* Besch. & C.Massal.

Kurzia setiformis (De Not.) J.J.Engel & R.M.Schust., The Bryologist 79: 514 (1976)

Basionym: *Lepidozia setiformis* De Not.

Kurzia sexfida (Steph.) Grolle, Revue Bryologique et Lichenologique 32: 178 (1964)

Basionym: *Lepidozia sexfida* Steph.

Kurzia tasmanica (Steph.) E.D.Cooper, Phytotaxa 97: 52 (2013)

Basionym: *Lepidozia tasmanica* Steph.

Kurzia temnomoides R.M.Schust., Journal of the Hattori Botanical Laboratory 48: 371 (1980) = **Kurzia calcarata** (Steph.) Grolle

Original material: New Zealand: South Island: Westland, Bog N. of Omoeroa R., S. of town of Franz Josef, in *Sphagnum-Hypolaena* (Restionaceae)-*Dacrydium-Phyllocladus alpinus* bog, in sun (RMS 67-251).

Engel and Glenny (2008) place *Kurzia temnomoides* in synonymy of *Kurzia calcarata*.

Kurzia tenax (Grev.) Grolle, Revue Bryologique et Lichenologique 32: 174 (1964)

Basionym: *Jungermannia tenax* Grev.

Kurzia trilobata (R.M.Schust.) R.M.Schust., Beihefte zur Nova Hedwigia 118: 270 (2000)

Basionym: *Kurzia quadriseta* var. *trilobata* R.M.Schust.

Engel & Glenny (2008) treat *Kurzia trilobata* as endemic to New Zealand.

Kurzia verticellata (Carrington) Grolle, Revue Bryologique et Lichenologique 32: 178 (1964)

Basionym: *Lepidozia verticellata* Carrington

Leiomitra Lindb., Acta Societatis Scientiarum Fennicae 10: 515 (1875)

Leiomitra elegans (Lehm.) Hässel, Novon 12: 465 (2002)

Basionym: *Trichocolea elegans* Lehm.

Leiomitra julacea Hatcher ex J.J.Engel, Novon 9: 26, Fig. 1 (1999) ≡ **Castanoclobos julaceus** (Hatcher ex J.J.Engel) J.J.Engel & Glenny

Original material: New Zealand: Stewart Is., Port Pegasus, Sawmiller's Arm, 1949, *Martin 621* (holo: F; iso: CHR, UWM).

Leioscyphus heterophyllus Steph., Species Hepaticarum 6: 253 (1922) = **Syzygiella tasmanica** (Hook.f. & Taylor) K.Feldberg, Váňa, Hentschel & Heinrichs

Original material: Hab. Australia orientalis (Ferd. v. Muller legit).

The synonymy of *Leioscyphus heterophyllus* should be confirmed, Stephani describes the plant as having small oblong,

acuminate or lacinate under-leaves, which are not a feature of *Syzygiella*.

Leioscyphus marginatus Steph., Bulletin de l'Herbier Boissier Series 2 6: 223 (1906) ≡ **Clasmatocolea marginata** (Steph.) Grolle

Original material: Hab. Tasmania (Hooker).

Leioscyphus repens Mitt., Flora Novae-Zelandiae 2(6): 134 (1854) = **Heteroscyphus physanthus** (Hook.f. & Taylor) R.M.Schust.

Original material: Hab. Falkland Islands ; growing among tufts of Dicranum aciphyllum. Hermite Island, amongst Jungermannia madida, J.D.H.

Lejeunea Lib., Annales Generales des Sciences Physiques 6: 372 (1820), *nom. cons*.

Lejeunea acroloba Prantl, Hedwigia 29: xiv (1890) ≡ **Colura acroloba** (Mont. ex Steph.) Jovet-Ast

Lejeunea aloba Sande Lac., Synopsis Hepaticarum Javanicarum: 72 (1856)

Original material: Habitat Javam. Teysm, in Herb. Dz. et Mb.

#Lejeunea angusta (Lehm. & Lindenb.) Mont., Histoire Physique, Politique et Naturelle de l'Ile de Cuba, Botanique: 469 (1842)

Basionym: *Jungermannia angusta* Lehm. & Lindenb.

Lejeunea angusta was listed as present in Western Australia by McCarthy (2006). However, there are no confirmed herbarium specimens of this neotropical species from Australia, and we therefore exclude this taxon from Australia.

Lejeunea anisophylla Mont., Annales des Sciences Naturelles; Botanique, sér. 2, 19: 263 (1843)

Original material: Hab. ad cortices inter muscos in insulis Sandwich à celeb. Gaudichaud collectos inveni.

Lejeunea apiculata Sande Lac., Nederlandsch Kruidkundig Archief 3: 421 (1853)

Original material: none cited, but published in a treatment of new species from Java collected ('detexit') by Dr. F. Jughuhn.

Lejeunea apollinea Gottsche, Fragmenta Phytographiae Australiae 11(Suppl.): 64 (1880)

Original material: Apollo Bay among Frullania fauciloba. F. v. M.

Lejeunea armitii (Steph.) Steph., Species Hepaticarum 5: 768 (1915)

Basionym: *Eulejeunea armitii* Steph.

Lejeunea balfourii Mitt., Philosophical Transactions of the Royal Society of London 168: 398 (1879) ≡ **Stictolejeunea balfourii** (Mitt.) E.W.Jones

Original material: None cited.

Lejeunea belangeriana Gottsche, Synopsis Hepaticarum 398. 1844[1845] ≡ **Ceratolejeunea belangeriana** (Gottsche) Steph.

Original material: Habitat in Insula Franciae (Belanger in Hb. L).

Lejeunea bischlerae B.M.Thiers, Cryptogamie - Bryologie Lichenologie 18: 223 (1997) ≡ **Microlejeunea bischlerae** (B.M.Thiers) B.M.Thiers

Original material: Queensland: Yungaburra, Gillies Road, near Mt. Nomico, 8 Sept. 1985, *G.A.M. Scott s.n.* (holo: MUCV 6939; iso: NY).

Lejeunea caespitosa Lindenb., Synopsis Hepaticarum 3: 382 (1845)

Original material: Habitat in Promontorio Bonae Spei (Hb. Hk. n. 18. s. n. Lej. serpyllifoliae L. et Lg.).

Lejeunea cardiocarpa Mont., Histoire Physique, Politique et Naturelle de l'Ile de Cuba, Botanique: 476 (1842) ≡ **Cololejeunea cardiocarpa** (Mont.) A.Evans

Original material: Hab. Ad folia Calophylli Calabae repentem in Cuba insula legerunt hanc speciem clarr. Ramon de la Sagra et Auber.

Lejeunea catanduana (Steph.) H.A.Mill., Nova Hedwigia 14: 66 (1967) ≡ **Lejeunea anisophylla** Mont.

Basionym: *Microlejeunea catanduana* Steph.

This name has been variously accepted as a distinct species of *Lejeunea* (Piippo et al. 2002) or as a synonym of *Lejeunea anisophylla* (Tan and Engel 1986, Lee 2013). Lee (2013) did not formally list this species in synonymy of *Lejeunea anisophylla*, but her discussion of variation within *L. anisophylla* makes clear she regarded *L. catanduana* as representing a small form of it. This was also the position accepted by the world checklist (Söderström et al. 2016) and is followed here.

Lejeunea ceylanica Gottsche, Synopsis Hepaticarum 3: 359 (1845) ≡ **Cheilolejeunea ceylanica** (Gottsche) R.M.Schust. & Kachroo

Original material: Habitat in Insula Ceylon. Inter Radulam javanicam cum Lej. Lindenbergii (ex Hb. Hk.) inveni.

Lejeunea cocoes Mitt., Journal of the Proceedings of the Linnean Society, Botany 5: 114 (1861)

Original material: Hab. Ad truncos Cocoes nucifera, Balagom, Ceylon, Gardner (No. 1499).

Lejeunea comitans Hook.f. & Taylor, London Journal of Botany 5: 400 (1846) ≡ **Cheilolejeunea comitans** (Hook.f. & Taylor) R.M.Schust.

Original material: Hab. Accompanied by *Ptychanthus mollis*, from New Zealand.

Lejeunea conica Sande Lac., Annales Musei Botanici Lugduno-Batavi 1(10): 311 (1864) ≡ **Colura conica** (Sande Lac.) K.I.Goebel

Original material: ab. lava, prov. Bantam in foliis: Blume. — Sumatra, in foliis Ficus diversifoliae : Teysmann.

Lejeunea cucullata (Reinw., Blume & Nees) Nees, Naturgeschichte der Europäischen Lebermoose 3: 293 (1838) ≡ **Metalejeunea cucullata** (Reinw., Blume & Nees) Grolle

Basionym: *Jungermannia cucullata* Reinw., Blume & Nees

Lejeunea cuspidistipula (Steph.) Steph., Species Hepaticarum 5: 793 (1915)

Basionym: *Eulejeunea cuspidistipula* Steph.

Lejeunea dactylophora Gottsche, Lindenb. & Nees, Novorum Actorum Academiae Caesareae Leopoldinae-Carolinae Naturae Curiosorum 19 Suppl. 1: 473 (1843) ≡ **Drepanolejeunea dactylophora** (Gottsche, Lindenb. & Nees) J.B.Jack & Steph.

Lejeunea decursiva Sande Lac., Nederlandsch Kruidkundig Archief 3: 522 (1853) ≡ **Cheilolejeunea decursiva** (Sande Lac.) R.M.Schust.

Lejeunea densistipula Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 7: 20 (1838) ≡ **Pycnolejeunea densistipula** (Lehm. & Lindenb.) Steph.

Original material: Ad corticem officinalem quandam, quae agnosci non potuit, reperimus.

Lejeunea denticalyx (Steph.) Steph., Species Hepaticarum 5: 794 (1915)

Basionym: *Eulejeunea denticalyx* Steph.

Lejeunea discreta Lindenb., Synopsis Hepaticarum 3: 361 (1845)

Original material: Habitat in Java insula inter L. thymifoliam B discretam (Hb. N.).

Lejeunea discreta var. *gracilipes* (Taylor) G.E.Lee & Heinrichs, Phytotaxa 358: 30 (2018) ≡ **Lejeunea gracilipes** (Taylor) Spruce

Basionym: *Omphalanthus gracilipes* Taylor

Lejeunea drummondii Taylor, London Journal of Botany 5: 400 (1846)

Original material: Hab. Swan River, Mr James Drummond.

Lejeunea epiphylla Mitt., Journal of the Proceedings of the Linnean Society, Botany 5: 118 (1861) ≡ **Leptolejeunea epiphylla** (Mitt.) Steph.

Original material: Hab. In insula Ceylon, ad folia, Padacumbra, Gardner (No. 1495).

Lejeunea epiphylla Colenso, Transactions and Proceedings of the New Zealand Institute 21: 73 (1889) , *nom. illeg.*

Original material: Hab. Epiphytical on Hymenophyllum (sps.), woods, Dannevirke, County of Waipawa; 1888, W. C.

Lejeunea epiphylla Colenso is a later homonym of *Lejeunea epiphylla* Mitt. In New Zealand the name *Lejeunea epiphylla* Colenso was applied to no less than four species, two of which were co-mingled in Colenso's intended type material (Renner et al. 2021). One of those, *Lejeunea perichymidia* M.A.M.Renner, occurs in Tasmania and it was to specimens of this species that Riclef Grolle applied the name *Lejeunea epiphylla* Colenso.

Lejeunea eulopha Taylor, London Journal of Botany 5: 391 (1846) ≡ **Lopholejeunea eulopha** (Taylor) Schiffn.

Original material: Hab. Pacific Isles. Nightingale, Hook. Herb.

Lejeunea exilis (Reinw., Blume & Nees) Grolle, Journal of the Hattori Botanical Laboratory 46: 353 (1979)

Basionym: *Jungermannia exilis* Reinw., Blume & Nees

Lejeunea falsinervis Sande Lac., Nederlandsch Kruidkundig Archief 3: 420 (1853) ≡ **Cheilolejeunea falsinervis** (Sande Lac.) Kachroo & R.M.Schust.

Original material: None cited, but published in 'Novae species Hepaticaum ex insula Java. Detexit Dr F. Junghuhn.'

Lejeunea fimbriata Gottsche, Fragmenta Phytographiae Australiae 11(Suppl.): 64 (1880) = **Lopholejeunea eulopha** (Taylor) Schiffn.

Original material: Rockingham's Bay on the roots of Dendrobium hispidulum, with perianths.

Lejeunea fimbriata Gottsche, Fragmenta Phytographiae Australiae 11(Suppl.): 56 (1880) = **Lopholejeunea eulopha** (Taylor) Schiffn.

Lejeunea flava (Schwägr.) Nees, Naturgeschichte der Europaischen Lebermoose 3: 277 (1838)

Basionym: *Jungermannia flava* Schwägr.

Lejeunea flava subsp. **orientalis** R.M.Schust., Journal of the Elisha Mitchell Scientific Society 75: 161 (1957)

Original material: Hattori's Hep. Jap. no. 135, Miyazaki, Kiushiu (Hattori).

Lejeunea gardneri Mitt., Journal of the Proceedings of the Linnean Society, Botany 5: 115 (1861) ≡ **Cheilolejeunea gardneri** (Mitt.) Mizut.

Original material: Hab. in insula Ceylon, Gardner.

Lejeunea goebelii Gottsche ex Schiffn., Nova Acta Academiae Caesareae Leopoldino-Carolinae Germanicae Naturae Curiosorum. Verhandlungen der Kaiserlich Leopoldinisch-Carolinischen Deutschen Akademie der Naturforscher 60: 240 (1893) ≡ **Cololejeunea trichomanis** (Gottsche) Besch.

Original material: Hab. Java (westlicher Theil), Tjibodas; auf lebenden Blättern mit der von Prof. Goebel in „Morphol. u. biolog. Studien" beschriebenen Ephemeraceae; lgt. Dr. G. Karsten, 25. Febr. 1890. (Die var. ß vide infra.) — West- Java; auf Blättern von Hymenophyllum: lgt. Prof. K. Goebel (forma normalis). — Öst-Indien, Penneng; anf einem Blatte von Acrotrema Acrdtrema Wightiana: lgt. Wallich.

Lejeunea gracilipes (Taylor) Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 213 (1884)

Basionym: *Omphalanthus gracilipes* Taylor

Lejeunea gracillima Mitt., Journal of the Proceedings of the Linnean Society, Botany 5: 115 (1861) ≡ **Microlejeunea ulicina** (Taylor) Steph.

Original material: Hab. In insula Ceylon, ad corticem arborum Point Galle, Gardner (No. 1500).

Lejeunea gunniana Mitt., Flora Tasmaniae 2: 235 (1860) = **Lejeunea drummondii** Taylor

Original material: Hab. Tasmania, Gunn. Brown's River, Oldfield.

Lejeunea hasskarliana Lehm., Novarum et Minus Cognitarum Stirpium Pugillus 8: 26 (1844) ≡ **Cololejeunea hasskarliana** (Lehm.) Schiffn.

Lejeunea helmsiana (Steph.) Steph., Species Hepaticarum 5: 796 (1915)

Basionym: *Eulejeunea helmsiana* Steph.

Lejeunea helmsiana is endemic to New Zealand.

Lejeunea herzogii Mizut., Journal of the Hattori Botanical Laboratory 30: 180 (1967)

Replaced synonym Cheilolejeunea pterota Herzog

Lejeunea howeana Grolle, Wissenschaftliche Zeitschrift der Friedrich-Schiller-Universität Jena. Mathematisch-naturwissenschaftliche Reihe 31: 219 (1982)

Replaced synonym: Cheilolejeunea wattsiana Steph.

Lejeunea imbricata (Nees) Nees, Synopsis Hepaticarum 3: 359 (1845) ≡ **Cheilolejeunea trapezia** (Nees) Kachroo & R.M.Schust.

Basionym: *Jungermannia thymifolia* var. *imbricata* Nees

Lejeunea implexicaulis (Hook.f. & Taylor) Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 3: 376 (1845) = **Cheilolejeunea mimosa** (Hook.f. & Taylor) R.M.Schust.

Basionym: *Jungermannia implexicaulis* Hook.f. & Taylor

Lejeunea incisa Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 3: 360 (1845) ≡ **Cheilolejeunea incisa** (Gottsche, Lindenb. & Nees) R.M.Schust. & Kachroo

Original material: Habitat in Java insula. In Herbario Neesii aderat in torulo Lej. sordidae, cum Frullania apiculata et vaginata et Herpetio quodam mixta.

Lejeunea inflectens Mitt., Journal of the Proceedings of the Linnean Society, Botany 5: 117 (1861)

Original material: Hab. In insula Ceylon, inter Macromitrias Horton Plains, Gardner.

Lejeunea intertexta Lindenb., Synopsis Hepaticarum 3: 379 (1845) ≡ **Cheilolejeunea intertexta** (Lindenb.) Steph.

Original material: Habitat in Ualan, Ulleay et Lugnor Insul. Carol. (Dr. Mertens in Hb. Acad. Petropol.)

Lejeunea javanica Nees, Synopsis Hepaticarum 3: 320 (1845) ≡ **Lopholejeunea javanica** (Nees) Schiffn.

Original material: In Java insula ad Marchantiam emarginatam , quam N. ab E., ex Hepaticis Junghunianis nobis communicaverat (Lg. et G).

Lejeunea laevigata Mitt., Flora Novae-Zelandiae 2(6): 157 (1854), *nom. illeg.* ≡ **Cololejeunea laevigata** (Steph.) R.M.Schust.

Lejeunea laevigata Mitt. is a later homonym of *Lejeunea laevigata* Nees ex Hampe.

Lejeunea latitans (Hook.f. & Taylor) Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 3: 345 (1845) ≡ **Microlejeunea latitans** (Hook.f. & Taylor) Heinrichs, Schäf.-Verw., Pócs & S.Dong

Basionym: *Jungermannia latitans* Hook.f. & Taylor

Lejeunea lhotzskiana Hampe, Synopsis Hepaticarum 3: 389 (1845) = **Cololejeunea minutissima** (Sm.) Schiffn.

Original material: In arborum Novae Hollandiae cortice legit Lhotzky (Hb. Hp.).

Lejeunea longifolia Mitt., Journal of the Proceedings of the Linnean Society, Botany 5: 117 (1861) ≡ **Cololejeunea longifolia** (Mitt.) Benedix ex Mizut

Original material: Hab. In Himalaya orientali temperata, Sikkim, alt. 4-S000 ped., J. D. H. (No. 1496). Habitu L. calyptrifolice, sed fusca foliisque planis.

Lejeunea lumbricoides (Nees) Nees, Synopsis Hepaticarum 3: 342 (1845)

Basionym: *Jungermannia lumbricoides* Nees

Lejeunea lyratifolia Hook.f. & Taylor, London Journal of Botany 5: 393 (1846) = **Diplasiolejeunea plicatiloba** (Hook.f. & Taylor) Grolle

Original material: Hab. On *Parmelia diatrypa*, Ach. Van Diemen's Land.

Lejeunea maculata Mitt., Journal of the Proceedings of the Linnean Society, Botany 5: 118 (1861) ≡ **Leptolejeunea maculata** (Mitt.) Schiffn.

Original material: Hab. In insula Ceylon, Pas-dum-Korle, Gardner (No. 1494).

Lejeunea mamillata Angstr., Ofversigt Kongl. Vetenskaps-Akademiens Forhandlingar 29(4): 14 (1872) ≡ **Cololejeunea mamillata** (Angstr.) E.A.Hodgs.

Original material: Hab. parasitice in folii Thamnii flagillaris.

Lejeunea mariana Gottsche, Synopsis Hepaticarum 3: 337 (1845) ≡ **Cheilolejeunea mariana** (Gottsche) B.M.Thiers & Gradst.

Original material: In Insulis Mariae Annae (Bongard in Hb. L. et Lg. sub nomine J. cognatae ex Hb. Ac. Petropol.) , legit Dr. Mertens.

Lejeunea meyeniana Gottsche, Lindenb. & Nees, Novorum Actorum Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum 19, suppl. 1: 472 (1843) ≡ **Cheilolejeunea meyeniana** (Gottsche, Lindenb. & Nees) R.M.Schust. & Kachroo

Original material: In Polysticho quodam Manilae insulae.

Lejeunea microloba Taylor, London Journal of Botany 5: 399 (1845)

Original material: Hab. South Sea Isles, Nightingale, Hook. Herb.

Lejeunea mimosa (Hook.f. & Taylor) Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 3: 377 (1845) ≡ **Cheilolejeunea mimosa** (Hook.f. & Taylor) R.M.Schust.

Basionym: *Jungermannia mimosa* Hook.f. & Taylor

Lejeunea muelleriana Gottsche, De Mexikanske Levermosser: 184 (1863) ≡ **Lopholejeunea muelleriana** (Gottsche) Steph.

Lejeunea nigricans Lindenb., Synopsis Hepaticarum 3: 316 (1845) ≡ **Lopholejeunea nigricans** (Lindenb.) Schiffn.

Original material: Habitat utraque forma in Java insula inter muscos cum Lej. subfusca et adplanta (Blume et Junghun in Hb. N.).

Lejeunea norfolkiensis Steph., Hedwigia 29: 78 (1890) = **Lejeunea gracilipes** (Taylor) Spruce

Lejeunea norrisii Grolle, Wissenschaftliche Zeitschrift der Friedrich-Schiller-Universitat Jena/Thuringen. Mathematisch-naturwissenschaftliche Reihe 31: 215 (1982) ≡ **Cheilolejeunea norrisii** (Grolle) M.A.M.Renner

Original material: Tasmania: Esperance Municipality, 146°44′E, 43°06′S, 50–100 m, on moist, diffusely lit twigs in Nothofagus forest, with scattered tall *Eucalyptus* at the Tahune Picnic Area Nature Trail, *Norris 29931* (holo: F; iso: JE).

Lejeunea obliqua Nees & Mont., Annales des Sciences Naturelles; Botanique 19: 264 (1843) ≡ **Cololejeunea obliqua** (Nees & Mont.) Schiffn.

Original material: Hab. in eodem folio cum priori lecta.

Lejeunea oceanica Mitt., Flora Vitiensis: 414 (1873) = **Ceratolejeunea belangeriana** (Gottsche) Steph.

Original material: Samoa, on Garovaglia Powellii (Powell I), Raiatea (Collie !).

Lejeunea patriciae Schäfer-Verwimp, Candollea 56: 64 (2001)

Replaced synonymLejeunea pilifera Tixier

Lejeunea pentadactyla Mont., Annales des Sciences Naturelles; Botanique ser. 3, 10: 113 (1848) ≡ **Drepanolejeunea pentadactyla** (Mont.) Steph.

Original material: Hab in foliis Crossostylis biflorae in consortio L. ellipticae Lehm. et Lindbg et Strigulae Microthyrii Montag. — Coll. Mus. Par. Parasit., n° 10.

Lejeunea peraffinis Schiffn., Nova Acta Academiae Caesareae Leopoldino-Carolinae Germanicae Naturae Curiosorum. Verhandlungen der Kaiserlich Leopoldinisch-Carolinischen Deutschen Akademie der Naturforscher 60: 242 (1893) ≡ **Cololejeunea peraffinis** (Schiffn.) Schiffn.

Original material: Hab. Java, Provinz Preanger; auf einem lebenden Blatte, steril; lgt. Dr. O. Warbürg.

Lejeunea perichymidia M.A.M.Renner, Arctoa 30: 203 (2021)

Original material: New Zealand: North Island: Auckland Ecological Region, Waitakere Ecological District, Waitakere Ranges, Spraggs Bush, 29 Jul. 1973, *R.E. Beever & J.E. Beever s.n.* (holo: AK 291280).

Lejeunea pilifera Tixier, Bulletin of the Singapore Botanic Gardens 25: 344 (1971), *nom. illeg.* ≡ **Lejeunea patriciae** Schäfer-Verwimp

Lejeunea planisssima Mitt., Journal of the Proceedings of the Linnean Society, Botany 5: 117 (1861) ≡ **Cololejeunea planissima** (Mitt.) Abeyw.

Original material: Hab. In insula Ceylon, ad corticem arborum Point Galle, Gardner (No. 1493).

Lejeunea planiuscula Mitt., Journal of the Proceedings of the Linnean Society, Botany 5: 111 (1861) ≡ **Spruceanthus planiusculus** (Mitt.) X.Q.Shi, R.L.Zhu & Gradst.

Original material: Hab. Pegu ad Rangoon, inter L. ungulatae et Meteorii squarrosi caespites, McClelland.

Lejeunea primordialis (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 3: 375 (1845)

Basionym: *Jungermannia primordialis* Hook.f. & Taylor

Lejeunea punctiformis Taylor, London Journal of Botany 5: 398 (1846) ≡ **Microlejeunea punctiformis** (Taylor) Steph.

Original material: Habitat in India orientali (Wight in Hb. Grevill.)

Lejeunea ramosissima Steph., Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie 8: 88 (1886)

Original material: Hab. Mte. Caffe, alt. 750 m, Pico de San Thome alt, 850 m, Bom Sucesso 1250 m. - Moller nr. 5, 36, 52.

Lejeunea rara Steph., Species Hepaticarum 5: 798 (1915) = **Lejeunea flava** (Schwägr.) Nees

Original material: Hab. Australia orientalis, New South Wales.

Lejeunea rara was listed in synonymy of *Lejeunea sinclairii* Spruce by Grolle (1982).

Lejeunea recurvistipula Gottsche, Synopsis Hepaticarum 3: 326 (1845) ≡ **Caudalejeunea recurvistipula** (Gottsche) Schiffn.

Original material: Habitat in Ins. Marianis vel Carolinis (Dr. Mertens in Hb. Acad. Petrop.).

Lejeunea reflexistipula (Lehm. & Lindenb.) Lehm. & Lindenb. ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 3: 335 (1845)

Basionym: *Jungermannia reflexistipula* Lehm. & Lindenb.

Lejeunea repleta Taylor, London Journal of Botany 5: 392 (1846) ≡ **Thysananthus repletus** (Taylor) Sukkharak & Gradst.

Original material: Hab. Madras. Dr Wight, Hook. Herb.

Lejeunea schiffneri Steph. ex Schiffn., Nova Acta Academiae Caesareae Leopoldino-Carolinae Germanicae Naturae Curiosorum 60: 233 (1893) ≡ **Leptolejeunea schiffneri** (Steph. ex Schiffn.) Steph.

Original material: Habit. Java, Provincia Preanger: satis frequens ad folia viva diversarum arborum et fruticum ; lgt. Dr. O. Warbürg.

Lejeunea serpentina Mitt., Journal of the Proceedings of the Linnean Society, Botany 5: 112 (1861) ≡ **Cheilolejeunea serpentina** (Mitt.) Mizut.

Original material: Hab. In insula Ceylon, Garnder

Lejeunea sinclairii Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 262, 271 (1884), *nom. illeg.* = **Lejeunea flava** (Schwägr.) Nees

Original material: N. Zelandia.

Molecular phylogenetic studies resolve *Lejeunea flava* paraphyletic, suggesting this species comprises a complex that requires detailed investigation (Heinrichs et al., 2013). The illegitimate name *L. sinclairii* Spruce auct. non Mitt. has been applied to Australasian specimens, however the illegitimacy of this name, and the absence of a comprehensive study of *Lejeunea flava* which is an acknowledged complex, both support the continued use of the name *L. flava* for Australian plants.

#Lejeunea sinclairii Mitt., Bonplandia 10: 19 (1862)

Original material: Seemann inter No. 843. Sinclair in Herb. Gourlie et Mitten.

Lejeunea sinclairii Mitt. does not occur in Australia.

Lejeunea sordida (Nees) Mont., Annales des Sciences Naturelles; Botanique 3: 211 (1835)

Basionym: *Jungermannia sordida* Nees

Lejeunea stenodentata M.A.M.Renner & Pócs, Phytotaxa 81: 8 (2013)

Replaced synonym: Drepanolejeunea dentata Steph.

Lejeunea stephensoniana Mitt., Flora Novae-Zelandiae 2(6): 155 (1854) ≡ **Ptychanthus stephensonianus** (Mitt.) Steph.

Original material: Hab. Northern Island: a fragment picked from mosses gathered in ravines near Wellington by Mr W. Stephenson (Hb. Mitten).

Lejeunea subelobata Carrington & Pearson, Proceedings of the Linnean Society of New South Wales, ser. 2 2(4): 1039 (1888)

Original material: Hab.—On wet rocks, George's River, Botany Bay, Janry., 1885 (47) ; George's River, Botany Bay, Janry., 1885 (42).

Lejeunea subfusca (Nees) Nees & Mont., Annales des Sciences Naturelles; Botanique, ser 2, 5: 61 (1836) ≡ **Lopholejeunea subfusca** (Nees) Schiffn.

Basionym: *Jungermannia subfusca* Nees

Lejeunea subg. *Acrolejeunea* Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 115 (1884) ≡ **Acrolejeunea** (Spruce) Steph.

Lejeunea subg. *Archilejeunea* Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 88 (1884) ≡ **Archilejeunea** (Spruce) Steph.

Lejeunea subg. *Ceratolejeunea* Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 198 (1884) ≡ **Ceratolejeunea** (Spruce) Jack & Steph.

Lejeunea subg. *Cheilolejeunea* Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 251 (1884) ≡ **Cheilolejeunea** (Spruce) Steph.

Lejeunea subg. *Cololejeunea* Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 291 (1884) ≡ **Cololejeunea** (Spruce) Steph.

Lejeunea subg. *Colurolejeunea* Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 80 (1884) ≡ **Colura** (Dumort.) Dumort.

Lejeunea subg. *Dendrolejeunea* Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 74 (1884) ≡ **Dendrolejeunea** (Spruce) Lacout.

Lejeunea subg. *Diplasiolejeunea* Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 301 (1884) ≡ **Diplasiolejeunea** (Spruce) Schiffn.

Lejeunea subg. *Drepanolejeunea* Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 186 (1884) ≡ **Drepanolejeunea** (Spruce) Steph.

Lejeunea subg. *Harpalejeunea* Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 164 (1884) ≡ **Harpalejeunea** (Spruce) Schiffn.

Lejeunea subg. *Leptolejeunea* Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 193 (1884) ≡ **Leptolejeunea** (Spruce) Schiffn.

Lejeunea subg. *Lopholejeunea* Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 119 (1884) ≡ **Lopholejeunea** (Spruce) Steph.

Lejeunea subg. *Mastigolejeunea* Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 100 (1884) ≡ **Thysananthus** subg. **Mastigolejeunea** (Spruce) Sukkharak & Gradst.

Lejeunea subg. *Microlejeunea* Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 286 (1884) ≡ **Microlejeunea** (Spruce) Steph.

Lejeunea subg. *Pycnolejeunea* Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 246 (1884) ≡ **Pycnolejeunea** (Spruce) Schiffn.

Lejeunea subg. *Stictolejeunea* Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 81 (1884) ≡ **Stictolejeunea** (Spruce) Schiffn.

Lejeunea tasmanica Gottsche, Linnea 28: 558 (1856) = **Lejeunea drummondii** Taylor

Original material: In Terra Van Diemen inter Radula bucciniferam repens (C. Stuart).

Lejeunea tenuis (Nees) Nees, Synopsis Hepaticarum 3: 390 (1845) ≡ **Drepanolejeunea tenuis** (Nees) J.B.Jack & Steph.

Basionym: *Jungermannia cucullata* var. *tenuis* Nees

Lejeunea ternatensis Gottsche, Synopsis Hepaticarum 3: 346 (1845) ≡ **Drepanolejeunea ternatensis** (Gottsche) Steph. ex Schiffn.

Original material: Pauca specimina in Frullania Ternatensi ex Insula Ternate inventa sunt (Hb. G.).

Lejeunea trichomanis Gottsche, Abhandlungen Herausgegeben vom Naturwissenschaftlichen verein zu Bremen 7: 362 (1882) ≡ **Cololejeunea trichomanis** (Gottsche) Besch.

Original material: Tamen ne quis credat hanc notabilem conditionem quasi unicam in illa sola Lejeunia calcarea existere, liceat addere me Lejeuniam alteram ejusdem indolis ab Illustrissimo Ferd. von Müller, Horti Melbourn. Directore accepisse, quam in Montibus Australiae septeutrionali- orientalis (Bellender-Ker-Range) altitudine 3000 ped. in Trichomanis fronde Karsten 1881 legerat et quam in Iconib. Hepatic. meis ineditis "Lejeuniam trichomanis" nominavi.

Lejeunea tripuncta Mitt., Flora Vitiensis 415 (1871)[1873]. ≡ **Leptolejeunea tripuncta** (Mitt.) Steph.

Original material: Viti, in foliis Spiridentis (Seemann !)

#Lejeunea tumida Mitt., Flora Novae-Zelandiae 2: 157 (1854)

Original material: Hab. Northern Island : on trees, Auckland, Sinclair. Amongst Mosses, in ravines near Wellington, Stephenson. Tehawera, etc., Colenso.

Lejeunea tumida was excluded from the Australian flora by Grolle (1982), this was corroborated by Renner et al. (2010). *Lejeunea tumida* is endemic to New Zealand.

Lejeunea venusta Sande Lac., Synopsis Hepaticarum Javanicarum: 64 (1856) = **Cololejeunea hasskarliana** (Lehm.) Schiffn.

Lejeunea vesiculosa Mitt., Journal of the Proceedings of the Linnean Society, Botany 5: 116 (1861) ≡ **Drepanolejeunea vesiculosa** (Mitt.) Steph.

Original material: Hab. In insula Ceylon, in Macromitrias, Gardner.

Lejeunea wallichiana (Lehm.) Lehm., Synopsis Hepaticarum 3: 361 (1845) ≡ **Microlejeunea wallichiana** (Lehm.) R.L.Zhu & Y.M.Wei

Basionym: *Jungermannia wallichiana* Lehm.

Lejeunea wattsiana (Steph.) H.A.Mill., Bonner & Bischl., Nova Hedwigia 14: 66 (1967)

Basionym: *Microlejeunea wattsiana* Steph.

Lejeunea wildii Steph., Hedwigia 28: 165 (1889) = **Acrolejeunea securifolia** (Nees) Steph. & Watts

Lembidium anomalum Rodway, Papers and Proceedings of the Royal Society of Tasmania 1916: 46 (1917) ≡ **Isolembidium anomalum** (Rodway) Grolle

Original material: Cradle Mt.

Lembidium cucullatum E.A.Hodgs., Records of the Dominion Museum 4: 110 (1962) ≡ **Isolembidium anomalum** var. **cucullatum** (E.A.Hodgs.) J.J.Engel & R.M.Schust.

Lembidium dendroides Carrington & Pearson, Proceedings of the Linnean Society of New South Wales, Series 2 2: 1047 (1888) ≡ **Kurzia dendroides** (Carrington & Pearson) Grolle

Original material: Hab. — On wet earth, Mermaid's Glen, Blackheath, Blue Mountains, 3,000 feet. September 5, 1855. — T. Whitelegge.

Lembidium isodictyon Herzog, Arkiv for Botanik Utgivet av k. Svenska Vetenskapsakademien, n. ser 1: 488 (1951) = **Hygrolembidium acrocladum** (Berggr.) R.M.Schust.

Lepicolea Dumort., Recueil d'Observations sur les Jungermanniacees: 20 (1835)

Lepicolea attenuata (Mitt.) Steph., Journal of the Linnean Society, Botany 29: 276 (1892)

Basionym: *Sendtnera attenuata* Mitt.

Lepicolea rara (Steph.) Grolle, Nova Hedwigia 16: 152 (1968)

Basionym: *Lepidozia rara* Steph.

Lepicolea scolopendra (Hook.) Dumort. ex Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 398 (1877)

Basionym: *Jungermannia scolopendra* Hook.

Lepidogyna R.M.Schust., Phytologia 45(5): 419 (1980)

Lepidogyna hodgsoniae (Grolle) R.M.Schust., Phytologia 45(5): 419 (1980)

Basionym: *Lepidolaena hodgsoniae* Grolle

Lepidogyna hodgsoniae is endemic to New Zealand.

Lepidolaena Dumort., Recueil d'Observations sur les Jungermanniacees: 13 (1835)

Lepidolaena brachyclada (Taylor ex Lehm.) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 393 (1877)

Basionym: *Frullania brachyclada* Taylor ex Lehm.

Lepidolaena clavigera (Hook.) Dumort. ex Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 393 (1877)

Basionym: *Jungermannia clavigera* Hook.

Lepidolaena fissistipula (Steph.) Grolle, Haussknechtia 3: 65 (1987)

Basionym: *Frullania fissistipula* Steph.

Lepidolaena hodgsoniae Grolle, Journal of the Hattori Botanical Laboratory 30: 29, F. 8 (1967) ≡ **Lepidogyna hodgsoniae** (Grolle) R.M.Schust.

#Lepidolaena palpebrifolia (Hook.) Dumort. ex Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 393 (1877)

Basionym: *Jungermannia palpebrifolia* Hook.

Lepidolaena palpebrifolia does not occur in Australia.

Lepidolaena reticulata (Hook.f. & Taylor) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 393 (1877)

Basionym: *Jungermannia reticulata* Hook.f. & Taylor

Lepidolaena taylorii (Gottsche) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 393 (1877)

Basionym: *Polyotus taylorii* Gottsche

Lepidolaena weindorferi Herzog, Annales Bryologici 6: 103 (1933) ≡ **Gackstroemia weindorferi** (Herzog) Grolle

Original material: Tasmania: Wilmot, leg. Weindorfer 1927.

Lepidolejeunea R.M.Schust., Beihefte zur Nova Hedwigia 9: 139 (1963)

Lepidolejeunea bidentula (Steph.) R.M.Schust., Phytologia 45(5): 425 (1980)

Basionym: *Pycnolejeunea bidentula* Steph.

Lepidolejeunea integristipula (J.B.Jack & Steph.) R.M.Schust., Phytologia 45(5): 425 (1980)

Basionym: *Pycnolejeunea integristipula* J.B.Jack & Steph.

Lepidolejeunea queenslandica B.M.Thiers, Memoirs of the New York Botanical Garden 45: 556 (1987)

Original material: Queensland: Cook Distr.: Mossman Gorge National Park, ca. 5 km W of Mossman, along Mossman River, 150 m, 12°8′S, 142°1′E, *Thiers & Halling 2575* (holo: AD; iso: NY).

Lepidozia (Dumort.) Dumort., Recueil d'Observations sur les Jungermanniacees: 19 (1835), *nom. cons.*

Basionym: *Pleuroschisma* sect. *Lepidozia* Dumort.

Lepidozia appendiculata Steph., Species Hepaticarum 3: 589 (1909) = **Kurzia tenax** (Grev.) Grolle

Original material: Hab. Tasmania, Brown River, in paludibus (Oldfield).

Lepidozia appressifolia Steph., Species Hepaticarum 3: 586 (1909)

Original material: Hab. Australia orient. (Watts), Tasmania (Moore).

Lepidozia appressifolia f. *armata* Rodway, Papers and Proceedings of the Royal Society of Tasmania 1916: 115 (1916) [1917] ≡ **Lepidozia appressifolia** Steph.

Original material: None cited.

The status of this taxon requires investigation, critical examination of original material is a necessary first step to improving our knowledge.

Lepidozia asymmetrica Steph., Species Hepaticarum 3: 586 (1909)

Original material: Hab. Tasmania (Moore, Weymouth).

The status of this taxon requires investigation, critical examination of original material is a necessary first step to improving our knowledge.

Lepidozia asymmetrica f. *parva* Rodway, Papers and Proceedings of the Royal Society of Tasmania 1916: 118 (1916) [1917] = **Lepidozia asymmetrica** Steph.

Original material: None cited.

The status of this taxon requires investigation, critical examination of original material is a necessary first step to improving our knowledge.

Lepidozia bisetula Herzog, Transactions and Proceedings of the Royal Society of New Zealand 68: 44. 1938., *nom. illeg.* ≡ **Telaranea herzogii** (E.A.Hodgs.) E.A.Hodgs.

Lepidozia brevicalycina Steph., Species Hepaticarum 3: 580 (1909) ≡ **Kurzia brevicalycina** (Steph.) Grolle

Original material: Hab. Australia, New South Wales (Watts).

Lepidozia buffalona Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 111 (1914)

Original material: Hab. Australia, (Buffalo Creek, near Gladesville; Blue Mountains and Cambewarra): Watts, 977, 941, 978, 965, 982, 914, etc.

Lepidozia calcarata Steph., Species Hepaticarum 3: 592 (1909) ≡ **Kurzia calcarata** (Steph.) Grolle

Original material: Hab. Nova Zealandia (Kirk); Australia, Queensland (Scortecchini).

Stephani's protologue describes a plant with recurved marginal spines at the base of each lobe (limbus = the border or margin of a structure), it does not suggest spines emanating from the disc below the lobe.

Lepidozia capillaris (Schwägr.) Lindenb., Synopsis Hepaticarum 212 (1845) = **Kurzia hippurioides** (Hook.f. & Taylor) Grolle

Basionym: *Jungermannia capillaris* Schwägr.

Lepidozia capillaris var. *geniculata* Carrington & Pearson, Papers and Proceedings of the Royal Society of Tasmania 1887: 2 (1888) = **Lepidozia appressifolia** Steph.

Original material: Hab., St. Crispin's Well, Mount Wellington, January IIth, 1886. 295.

Lepidozia centipes Taylor ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 2: 204 (1845) ≡ **Ceramanus centipes** (Taylor ex Gotsche, Lindenb. & Nees) E.D.Cooper

Original material: Habitat in Terra van Diemen (Spence in Hb. Grevill.). Specimina nobiscum communicavit amicissimus Taylor (Hb. G.).

Lepidozia chordulifera Taylor, London Journal of Botany 5: 371 (1846)

Original material: Hab. Chonos Archipelago, n. 461 ; Darwin, Hook. Herb.

Lepidozia clatritexta Steph., Species Hepaticarum 3: 583 (1909) ≡ **Ceramanus clatritexta** (Steph.) E.D.Cooper

Original material: Hab. Australia, Swan River (Drummond).

Lepidozia communis Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 111 (1914)

Original material: Hab. Australia, (Grand Canyo, Blackheath): Watts 1014.

Lepidozia compacta Steph., Species Hepaticarum 3: 592 (1909) ≡ **Kurzia compacta** (Steph.) Grolle

Original material: Hab. Nova Zelandia (Lauterbach)

Lepidozia complanata Herzog, Memoranda Societatis pro Fauna et Flora Fennica 27: 92 (1951) = **Ceramanus clatritexta** (Steph.) E.D.Cooper

Lepidozia concinna Colenso, Transactions and Proceedings of the New Zealand Institute 18: 244 (1885)

Original material: Hab. On living trees, forming thick and large patches; wet forests near Norsewood, County of Waipawa, 1885, W.C.

Lepidozia crassitexta Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 111 (1914)

Original material: Hab. Australia (Rodriguez Pass, Blackheath): Watts, 1005.

The status of this taxon requires investigation, critical examination of original material is a necessary first step to improving our knowledge.

Lepidozia cucullifolia Steph., Konglliga Svenska Vetenskapsakademiens Handlingar 26: 51 (1900) ≡ **Kurzia cucullifolia** (Steph.) R.M.Schust.

Original material: Hab. Patagonia occidentalis in insulis Guaitecas in truncis putridis.

#Lepidozia cupressina (Schwägr.) Lindenb., Synopsis Hepaticarum 2: 207 (1845)

Basionym: *Jungermannia cupressina* Schwägr.

With one exception, Australian records are all from Victoria and date to the turn of the 20th Century, most of which were collected (and presumably identified) by R.A. Bastow. The type of *Lepidozia cuppressina* is from Jamaica, and the application of this name to the Australian flora seems to be a matter of historical expediency, rather than accuracy.

Lepidozia digitata Herzog, Transactions and Proceedings of the Royal Society of New Zealand 68: 45 (1938)

Original material: New Zealand, near Atiamur, Allison 72.

Lepidozia dispar (Mont. ex Taylor & Hook.f.) Mont., Voyage au Pole sud et dans l'Oceanie sur les Corvettes l'Astrolabe et la Zelee 1: 248 (1845) = **Kurzia hippurioides** (Hook.f. & Taylor) Grolle

Basionym: *Jungermannia dispar* Mont. ex Hook.f. & Taylor

Lepidozia eenii S.W.Arnell, Svensk Botanisk Tidskrift 57: 190 (1963)

Lepidozia elegans Colenso, Transactions and Proceedings of the New Zealand Institute 21: 65 (1888) [1889] ≡ **Ceramanus elegans** (Colenso) E.D.Cooper

Original material: Hab. On rotten wood, forests, Great Barrier Island, Firth of Thames; 1888; Mr C.P. Winkelmann.

Lepidozia furcatifolia Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 112 (1914) ≡ **Acromastigum furcatifolium** (Steph.) E.A.Br.

Original material: Hab. Australia, (Horse Shoe Falls, Blackheath): Watts, 1027.

Lepidozia glaucophylla (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 2: 207 (1845)

Basionym: *Jungermannia glaucophylla* Hook.f. & Taylor

Lepidozia gottscheana Lindenb., Synopsis Hepaticarum 2: 206 (1845) = **Neolepidozia patentissima** (Hook.f. & Taylor) E.D.Cooper

Original material: Habitat in Nova Zeelandia (Hb. Hk., L. et Lg. n. 28).

Lepidozia gracillima Carrington & Pearson, Proceedings of the Linnean Society of New South Wales, Series 2 2: 1045 (1888)

Original material: Hab. — On wet rocks, Botany Bay, June, 1885, male.

The status of this taxon requires investigation, critical examination of original material is a necessary first step to improving our knowledge.

Lepidozia grossiseta Steph., Species Hepaticarum 3: 584 (1909) ≡ **Ceramanus grossiseta** (Steph.) E.D.Cooper

Original material: Hab. Tasmania (Moore).

Lepidozia hasskarliana Steph., Species Hepaticarum 3: 614 (1909)

Basionym: *Lepidozia supradecomposita* var. *hasskarliana* Gottsche, Lindenb. & Nees

Lepidozia hastatistipula Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 113 (1914)

Original material: Hab. Australia, (Healesville, Vict.): Watts, 966.

Lepidozia herzogii E.A.Hodgs., Transactions of the Royal Society of New Zealand 83: 618 (1956) ≡ **Telaranea herzogii** (E.A.Hodgs.) E.A.Hodgs.

Lepidozia integristipula Steph., Species Hepaticarum 6: 331 (1922) ≡ **Drucella integristipula** (Steph.) E.A.Hodgs.

Original material: Hab. Nova Zelandia (Kirk legit).

Lepidozia laevifolia (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 2: 208 (1845)

Basionym: *Jungermannia laevifolia* Hook.f. & Taylor

Lepidozia lateconica Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 113 (1914) ≡ **Kurzia lateconica** (Steph.) Grolle

Original material: Hab. Australia (Barron Falls, North Queensland; leg. Mrs Brotherton) Watts, 976.

Lepidozia lindenbergii Gottsche, Synopsis Hepaticarum 213 (1845) ≡ **Tricholepidozia lindenbergii** (Gottsche) E.D.Cooper

Original material: Habitat in Nova Zeelandia inter L. praenitentem (Hb. Hk.).

Lepidozia longiscypha (Taylor) Steph., Species Hepaticarum 3: 580 (1909) ≡ **Paracromastigum longiscyphum** (Taylor) R.M.Schust. & J.J.Engel

Basionym: *Jungermannia longiscypha* Taylor

Lepidozia longiscypha var. *occidentalis* Herzog, Transactions of the British Bryological Society 1: 187 (1949) = **Paracromastigum longiscyphum** (Taylor) R.M.Schust. & J.J.Engel

Original material: Western Australia: Bayswater, 14 Nov. 1945, *A.M. Baird s.n.* (holo: UWA, no. 104 [?now at PERTH]).

#Lepidozia microphylla (Hook.) Lindenb., Synopsis Hepaticarum 2: 202 (1845)

Basionym: *Jungermannia microphylla* Hook.

Lepidozia microphylla is endemic to New Zealand. Tasmanian records are likely based on a member of the *Lepidozia procera* complex, whose status is under investigation. The latter taxon also occurs in New Zealand.

Lepidozia microstipula Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 114 (1914)

Original material: Hab. Australia, (Lane Cove River, above Fig Tree Bridge) : Watts, 958.

Lepidozia montana Steph., Species Hepaticarum 3: 587 (1909)

Original material: Hab. Australia. N. S. Wales (leg. ?).

Lepidozia mooreana Steph., Species Hepaticarum 3: 585 (1909) ≡ **Tricholepidozia pulcherrima** var. **mooreana** (Steph.) E.D.Cooper

Original material: Hab. Tasmania (J. B. Moore).

Lepidozia multifida Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 114 (1914) = **Lepidozia septemfida** Steph.

Original material: Hab. Australia, New South Wales (Blue Mountains): Watts, 974, 975, 964.

Lepidozia nova Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 115 (1914)

Original material: Hab. Australia, (Blue Mountains and Mount Wilson): Watts, 1033, 1054 and 1066.

Lepidozia obtusiloba Steph., Species Hepaticarum 3: 598 (1909)

Original material: Hab. Nova Zelandia, Insula Meridionalis (Beckett, Helms).

Lepidozia oldfieldiana Steph., Species Hepaticarum 3: 581 (1909) = **Neolepidozia tridactylis** (Lehm. et Lindenb.) E.D.Cooper

Original material: Hab. Tasmania (Oldfield, Moore).

Lepidozia parvistipa Taylor, New Hepaticae. London Journal of Botany 5: 370 (1846)

Original material: Hab. Swan River. Mr James Drummond.

Lepidozia parvitexta Steph., Species Hepaticarum 3: 598 (1909) = **Lepidozia procera** Mitt.

Original material: Hab. Nova Zelandia (Goebel, Beckett).

Lepidozia pendulina (Hook.) Lindenb., Synopsis Hepaticarum 2: 208 (1845)

Basionym: *Jungermannia pendulina* Hook.

Lepidozia procera Mitt., Flora Tasmaniae 2(8): 231 (1859)

Original material: Hab. Tasmania, Gunn. Mount Wellington, among *Plagiochila retrospectans* and *L. ulotrix*, Oldfield.

Lepidozia pulcherrima Steph., Species Hepaticarum 3: 600 (1909) ≡ **Tricholepidozia pulcherrima** (Steph.) E.D.Cooper

Original material: Hab. Nova Zelandia, Okarito (Kirk).

Lepidozia quadricilia Steph., Species Hepaticarum 6: 338 (1922) = **Tricholepidozia quadriseta** (Steph.) E.D.Cooper

Original material: Hab. Australia : Clarence (Verreaux legit).

Lepidozia quadrifida Kunze ex Lindenb., Synopsis Hepaticarum 2: 203 (1845)

Original material: Habitat in Nova Hollandia inter *Dicranum brachyphyllum* (Hb. Kunze, L. et Lg.).

Lepidozia quadriseta Steph., Species Hepaticarum 3: 582 (1909) ≡ **Tricholepidozia quadriseta** (Steph.) E.D.Cooper

Original material: Hab. N. South Wales (Watts).

Lepidozia quadristipula Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 115 (1914) ≡ **Neolepidozia quadristipula** (Steph.) E.D.Cooper

Original material: Hab. Australia, (Rotunda, Neate's Glen, Blackheath): Watts, 1009.

Lepidozia rara Steph., Species Hepaticarum 3: 618. 1909 ≡ **Lepicolea rara** (Steph.) Grolle

Original material: Hab. Java (leg.?).

Lepidozia reversa Carrington & Pearson, Journal of Botany, British and Foreign 27: 225 (1889) ≡ **Kurzia reversa** (Carrington & Pearson) Grolle

Original material: Hab. — Growing on rotten wood and earth, intermingled with other species, Sandy Creek, near Beenleigh, Queensland, collected by Mr. C. A. Wild, May, 1887. In springs, Robertson River, Queensland (Herb. Stephani).

Lepidozia saddlensis Besch. & C.Massal., Bulletin Mensuel de la Societe Linneenne de Paris 1(79/80) pre-print: 8 (1886) ≡ **Kurzia saddlensis** (Besch. & C.Massal.) Grolle

Original material: Tierra del Fuego, in insula Saddle (Wollaston).

Lepidozia septemfida Steph., Species Hepaticarum 3: 588 (1909)

Original material: Hab. Australia, N.S. Wales (Watts).

Lepidozia setiformis De Not., Memoria della Reale Accademia delle Scienze Torino, ser. 2 16: 225 (1857) ≡ **Kurzia setiformis** (De Not.) J.J.Engel & R.M.Schust.

Original material: Caulibus Racomitrii superius allati baeret prope urbem Valparaiso.

Lepidozia sexfida Steph., Species Hepaticarum 3: 582 (1909) ≡ **Kurzia sexfida** (Steph.) Grolle

Original material: Hab. Tasmania (Weymouth), Australia orient. (Watts).

Lepidozia supradecomposita var. *hasskarliana* Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 2: 202 (1845) ≡ **Lepidozia hasskarliana** Steph.

Original material: Habitat in montosis regionis orientalis et australis districtus Bantam Javae insulae (Blume et Haskarl in Hb. N., L. et Lg.).

Lepidozia tasmanica Steph., Species Hepaticarum 3: 580 (1909) ≡ **Kurzia tasmanica** (Steph.) E.D.Cooper

Original material: Hab. Tasmania (Moore)

Lepidozia terricola Steph., Species Hepaticarum 3: 585 (1909)

Original material: Hab. New South Wales, leg. ?

Lepidozia tridactylis (Lehm. & Lindenb.) Mont., Voyage au Pole sud et dans l'Oceanie sur les Corvettes l'Astrolabe et la Zelee 1: 248 (1845) ≡ **Telaranea tridactylis** (Lehm. & Lindenb.) J.J.Engel & G.L.Merr.

Basionym: *Jungermannia tridactylis* Lehm. & Lindenb.

Lepidozia tripilosa Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 116 (1914) = **Ceramanus elegans** (Colenso) E.D.Cooper

Original material: Hab. Australia (Centennial Glen, Blackheath): Watts, 1043.

Lepidozia ulothrix (Schwägr.) Lindenb., Synopsis Hepaticarum 2: 210 (1845)

Basionym: *Jungermannia ulothrix* Schwägr.

Lepidozia vastiloba Steph., Species Hepaticarum 3: 581 (1909) ≡ **Paracromastigum vastilobum** (Steph.) J.J.Engel & G.L.Merr.

Original material: Hab. Australia orient (Forsyth); Tasmania (Moore).

Lepidozia verticellata Carrington, Papers and Proceedings of the Royal Society of Tasmania 1887: 3 (1888) ≡ **Kurzia verticellata** (Carrington) Grolle

Original material: none cited.

Lepidozia verticillata Carrington & Pearson, Proceedings of the Linnean Society of New South Wales, Series 2 2: 1046 (1888), *nom. inval.* ≡ **Kurzia verticellata** (Carrington) Grolle

This citation refers only to a mention in text of the name 'which I have described as *Lepidozia verticillata*' presumably a reference to the protologue on the line above, suggesting this name is an orthographic variant of *Lepidozia verticellata*.

Lepidozia wattsiana Steph., Species Hepaticarum 3: 586 (1909)

Original material: Hab. Australia, N. S. Wales (Bauerlen, Watts).

Lepidozia weymouthiana Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 117 (1914)

Original material: Hab. Tasmania (Weymouth, 1168b.).

Lepidozia whiteleggeana Steph., Species Hepaticarum 3: 584 (1909) = **Ceramanus clatritexta** (Steph.) E.D.Cooper

Original material: Hab. Australia, Cook River (Whitelegge).

Leptocolea aoshimensis Horik., Journal of Science of the Hiroshima University: Series B, Division 2 (Botany) 1: 20 (1931) = **Cololejeunea planissima** (Mitt.) Abeyw.

Leptocolea appressa A.Evans, Bulletin of the Torrey Botanical Club 39: 606 (1912) ≡ **Cololejeunea appressa** (A.Evans) Benedix

Original material: On bark of trees. Jamaica: John Crow Peak, Evans (104), July 1903; Clyde Valley, Evans (270), July 1903. No. 104 may be considered the type.

Leptocolea ocelloides Horik., Journal of Science of the Hiroshima University: Series B, Division 2 (Botany) 2: 280 (1934) ≡ **Cololejeunea ocelloides** (Horik.) Mizut.

Leptocolea pallida Steph., Species Hepaticarum 5: 855 (1916) = **Cololejeunea hasskarliana** (Lehm.) Schiffn.

Original material: Hab. Java.

Leptocolea pseudofloccosa Horik., Journal of Science of the Hiroshima University: Series B, Division 2 (Botany) 1: 87 (1932) ≡ **Cololejeunea pseudofloccosa** (Horik.) Benedix

Leptocolea triapiculata Herzog, Annales Bryologici 5: 95. 1932. ≡ **Cololejeunea triapiculata** (Herzog) Tixier

Original material: Sumatra, Fort de Kock, leg. K.v. Goebel, no. 17c

Leptocolea wattsiana Steph., Species Hepaticarum 5: 856 (1916) = **Cololejeunea lanciloba** Steph.

Original material: Hab. Australia, New South Wales.

Leptocolea wattsiana Steph., Species Hepaticarum 5: 856 (1916) = **Cololejeunea lanciloba** Steph.

Original material: Hab. Australia. New South Wales.

Leptolejeunea (Spruce) Schiffn., Hepaticae. Die Naturlichen Pflanzenfamilien 1(3): 126 (1893)

Basionym: *Lejeunea* subg. *Leptolejeunea* Spruce

Leptolejeunea australis Steph., Species Hepaticarum 5: 389 (1913)

Original material: Hab. Australia orientalis (Mossman's Bay).

Leptolejeunea denticulata Steph., Species Hepaticarum 5: 389 (1913)

Original material: Hab. Australia subtropica. Bellender Ker Montes.

#Leptolejeunea elliptica (Lehm. & Lindenb.) Besch., Revue Bryologique 19(1): 14 (1892)

Basionym: *Jungermannia elliptica* Lehm. & Lindenb.

Molecular phylogenetic investigations resolve *Leptolejeunea elliptica* as a neotropical species that does not occur in Malesia or Australasia. This evidence suggests reports of *Leptolejeunea elliptica* from Australia are based on misidentifications of other species. We accept Shu et al. (2021)'s restriction of *L. elliptica* to the neotropics and exclude the species from Australia.

Leptolejeunea epiphylla (Mitt.) Steph., Species Hepaticarum 5: 362 (1913)

Basionym: *Lejeunea epiphylla* Mitt.

Leptolejeunea maculata (Mitt.) Schiffn., Conspectus Hepaticarum Archipelagi Indici: 275 (1898)

Basionym: *Lejeunea maculata* Mitt.

Leptolejeunea picta Herzog, Flora: oder Allgemeine Botanischer Zeitung 135: 430 (1942)

Original material: Sumatra, Prapat, auf Farnblättern, leg O. Renner no. 286

Leptolejeunea rhombifolia Steph., Hedwigia 35: 107 (1896)

Original material: Hab. Nova Guinea (Karnback 1013 p.p.), Nova Caledonia (Lenormand)

Leptolejeunea rosulans Steph., Species Hepaticarum 5: 390 (1913)

Original material: Hab. Australia. Clyde District. Ballina. Richmond River.

Leptolejeunea schiffneri (Steph. ex Schiffn.) Steph., Hedwigia 35(3): 107 (1896)

Basionym: *Lejeunea schiffneri* Steph. ex Schiffn.

Leptolejeunea serrulata Herzog, Flora: oder Allgemeine Botanischer Zeitung 135: 426 (1942) = **Leptolejeunea tripuncta** (Mitt.) Steph.

#Leptolejeunea subacuta Steph. ex A.Evans, Proceedings of the Washington Academy of Sciences 8: 149 (1906)

Australasian reports of *Leptolejeunea subacuta* are referable to *Leptolejeunea australis* Steph. *Leptolejeunea subacuta* is an Asian species.

Leptolejeunea subrotundifolia Herzog, Flora 135: 424 (1942)

Original material: West-Borneo: bei Lebang Hara, auf Rinde; am Serawei bei Djotta am Dorfzaun H. Winkler, no. 3032; no. 3028

#Leptolejeunea tripuncta (Mitt.) Steph., Species Hepaticarum 5: 388 (1913)

Basionym: *Lejeunea tripuncta* Mitt.

Reported for Australia by Shu et al. (2016) on the basis of Curnow 3042 (CANB) which was subsequently resolved as part of *Leptolejeunea subrotundifolia* by Shu et al. (2021). Until the presence of *Leptolejeunea tripuncta* is confirmed we treat it as absent from Australia, though its presence here should be anticipated given its occurrence in Malaysia, Papua New Guinea, New Caledonia, and Fiji (Shu et al. 2016).

Leptophyllopsis R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 269 (1963)

Leptophyllopsis laxa (Mitt.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 270 (1963)

Basionym: *Chiloscyphus laxus* Mitt.

Leptoscyphus Mitt., Hooker's Journal of Botany and Kew Garden Miscellany 3: 358 (1851)

Leptoscyphus australis (Gottsche, Lindenb. & Nees) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 270 (1963)

Basionym: *Chiloscyphus australis* Gottsche, Lindenb. & Nees

Leptoscyphus belmoranus (Steph.) J.J.Engel, Journal of the Hattori Botanical Laboratory 74: 35 (1993) = **Leptoscyphus excipulatus** var. **excipulatus**

Basionym: *Lophocolea belmorana* Steph.

Leptoscyphus compactus (Colenso) J.J.Engel, Nova Hedwigia 100: 579 (2015)

Basionym: *Chiloscyphus compactus* Colenso

Leptoscyphus excipulatus (Steph.) J.J.Engel, Journal of the Hattori Botanical Laboratory 74: 35 (1993)

Basionym: *Lophocolea excipulata* Steph.

Leptoscyphus excipulatus var. **canaliculatus** J.J.Engel, Nova Hedwigia 103: 299 (2016)

Original material: Tasmania: Cradle Mtn-Lake St. Clair National Park, above Dove River, off track between Quailes Hill and Pencil Pine Lodge, SE of Pencil Pine Lodge, 880 m, *Engel 19614* (holo: F; iso: HO).

Leptoscyphus expansus (Lehm.) Grolle, Nova Acta Leopoldina 25 (161): 42 (1962)

Basionym: *Jungermannia expansa* Lehm.

One of eight southern South American species with an amphi-Atlantic distribution (Engel & Glenny 2019a: 574).

Leptoscyphus heterophyllus (Steph.) J.J.Engel, Phytotaxa 326: 156 (2017)

Basionym: *Chiloscyphus heterophyllus* Steph.

Leptoscyphus horizontalis (Hook.) Grolle, Nova Acta Leopoldina 25 (161): 42 (1962)

Basionym: *Jungermannia horizontalis* Hook.

Leptoscyphus horizontalis is a southern South American endemic that does not occur in Australia.

Leptoscyphus idiodontus J.J.Engel, Nova Hedwigia 103: 287 (2016)

Original material: New Zealand: North Island: Gisborne Province, Urewera National Park, Huiarau Range, summit area of Te Rangaakapua, 1265–1320 m, *Engel 23364* (holo: F; iso: AK).

Leptoscyphus incomptus J.J.Engel, Nova Hedwigia 103: 305 (2016)

Original material: Tasmania: just below summit of Collins Bonnet, 1175 m, *Engel 13314* (holo: F; iso: HO).

Leptoscyphus longistipulus (Hook.f. & Taylor) J.J.Engel, The Bryologist 94: 436 (1991) ≡ **Chiloscyphus subemarginatus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Basionym: *Lophocolea longistipula* Steph.

Leptoscyphus microphyllidicus J.J.Engel, Nova Hedwigia 103: 293 (2016)

Original material: New Zealand: Auckland Is., Lake Speight, near Coleridge Bay, Carnley Harbour, 5 Jan 1973, *Common 2398* (holo: G; iso: CHR, MSC).

Leptoscyphus physanthus (Hook.f. & Taylor) J.J.Engel, Nova Hedwigia 99: 168 (2014)

Basionym: *Jungermannia physantha* Hook.f. & Taylor

Leptoscyphus physanthus does not occur in Australia.

Leptoscyphus subemarginatus (Hook.f. & Taylor) J.J.Engel, The Bryologist 94: 436 (1991) ≡ **Chiloscyphus subemarginatus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Basionym: *Lophocolea subemarginata* Hook.f. & Taylor

Lethocolea Mitt., Handbook of the New Zealand Flora 2: 751, 753 (1867), *nom. cons.*

Lethocolea pansa (Taylor) G.A.M.Scott & K.G.Beckm., Symposia Biologica Hungarica 35: 212 (1987)

Basionym: *Jungermannia pansa* Taylor

Leucolejeunea A.Evans, Torreya 7: 225 (1907) = **Cheilolejeunea** (Spruce) Steph.

Leucolejeunea xanthocarpa (Lehm. & Lindenb.) A.Evans, Torreya 7: 225 (1907) ≡ **Cheilolejeunea xanthocarpa** (Lehm. & Lindenb.) Malombe

Basionym: *Jungermannia xanthocarpa* Lehm. & Lindenb.

Lobatiriccardia (Mizut. & S.Hatt.) Furuki, Journal of the Hattori Botanical Laboratory 70: 319 (1991)

Basionym: *Riccardia* subg. *Lobatiriccardia* Mizut. & S.Hatt.

Lobatiriccardia alterniloba (Hook.f. & Taylor) Furuki, Journal of the Hattori Botanical Laboratory 70: 319 (1991)

Basionym: *Jungermannia alterniloba* Hook.f. & Taylor

Hewson (1970 p.186) states '*Aneura alterniloba* (Hook.f. et Tayl.) Tayl. var. *alterniloba* (Hook.f. et Tayl.) comb. nov. occurs in New Zealand.' Hewson's implication was that the typical variety does not occur in Australia.

Lobatiriccardia alterniloba var. **gigantea** (Steph.) Nebel, Phytotaxa 81: 10 (2013)

Basionym: *Aneura gigantea* Steph.

Lobatiriccardia alterniloba var. **robusta** (Rodway) Nebel, Phytotaxa 81: 10 (2013)

Basionym: *Aneura alterniloba* f. *robusta* Rodway

Lobatiriccardia athertonensis (Hewson) Furuki, Journal of the Hattori Botanical Laboratory 70: 319 (1991)

Basionym: *Aneura athertonensis* Hewson

Lophocolea allodonta (Hook.f. & Taylor) Gottsche, Lindenb. & Nees, Synopsis Hepaticarum: 163 (1845) ≡ **Heteroscyphus allodontus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Basionym: *Jungermannia allodonta* Hook.f. & Taylor

Lophocolea alternifolia (Hook.f. & Taylor) Gottsche, Lindenb. & Nees, Synopsis Hepaticarum: 695 (1847) = **Chiloscyphus leptanthus** (Steph.) J.J.Engel & R.M.Schust.

Basionym: *Jungermannia alternifolia* Hook.f. & Taylor

Lophocolea amplectens Mitt., Flora Tasmaniae 2(8): 226 (1859) = **Clasmatocolea inflexispina** (Hook.f. & Taylor) J.J.Engel

Lophocolea angulistipula Steph., Bulletin de l'Herbier Boissier Series 2 6: 791 (1906) = **Clasmatocolea strongylophylla** (Hook.f. & Taylor) Grolle

Original material: Hab. Tasmania, Weymouth. 'Typus in herb. Stephani.'

Lophocolea argentea Steph., Bulletin de l'Herbier Boissier Series 2 6: 874 (1906) = **Chiloscyphus subporosus** var. **subporosus**

Original material: Hab. Tasmania, Weymouth 'typus in herb. Stephani.'

Engel (2010) designates 'the specimen' in G as lectotype. However, as only a single specimen is present in G, which was designated the type, (sub. 343 [Steph. det number] ex 1003 [Weymouth number?] the specimen in G is the holotype, and duplicates are isotypes (Art. 9.1).

Lophocolea australis (Hook.f. & Taylor) Mitt., Flora Tasmaniae 2(8): 226 (1859), *nom. illeg.* ≡ **Leptoscyphus australis** (Gottsche, Lindenb. & Nees) R.M.Schust.

Basionym: *Chiloscyphus australis* Gottsche, Lindenb. & Nees

There is a lot of confusion surrounding the name *Leptoscyphus australis* and its synonyms, including this name of Mitten's. See the note below under *Lophocolea austroalpina* Steph. for an explanation of the illegitimacy of *Lophocolea australis* (Hook.f & Taylor) Mitt.

Lophocolea australis Gottsche, Linnaea 28: 553 (1856) ≡ **Chiloscyphus novae-zeelandiae** var. **grandistipulus** (Schiffn.) J.J.Engel

Engel & Glenny (2019a) have *Lophocolea australis* Gottsche in synonymy of *Chiloschyphus novae-zelandiae* var. *grandistipulus* (p. 120) and *Leptoscyphus australis* (p. 577).

Lophocolea austrigena f. *bifida* Rodway, Tasmanian Bryophyta 2: 46 (1916) ≡ **Chiloscyphus austrigenus** subsp. **okaritanus** (Steph.) J.J.Engel

Lophocolea austroalpina Steph., Bulletin de l'Herbier Boissier Series 2 6: 876 (1906), *nom. illeg.*, *superfl.* = **Chiloscyphus novae-zeelandiae** var. **grandistipulus** (Schiffn.) J.J.Engel

Basionym: *Lophocolea australis* Gottsche

Engel & Glenny (2019a) list *Lophocolea austroalpina* Steph. as illegitimate, possibly because *Lophocolea australis* Gottsche was listed as a synonym. In publishing *L. austroalpina*, Stephani (1906) made clear that he was proposing a new name for *L. australis* Gottsche (1856). Stephani (1906) did this because he [likely correctly] interpreted the type of *L. australis* Gottsche as belonging to a different species from *L. australis* (Hook.f. & Taylor) Mitt., *nom. inval.*, which Mitten (1859) attempted to make based on *Jungermannia australis* Hook.f. & Taylor *nom. illeg.* (non *Jungermannia australis* Lehm. & Lindenb. 1834). Stephani's citation 'non Taylor' is a little oblique, but that short statement is key to interpreting the intent of this particular nomenclatural act, which was to propose a new name for *Lophocolea australis* Gottsche believing the name to be preoccupied in *Lophocolea* by Mittens proposed combination based on Hooker and Taylor's species *Jungermannia australis*. However, Hooker & Taylor's

name *Jungermannia australis* Hook.f. & Taylor is an illegitimate later homonym of *J. australis* Lehm. & Lindenb. (1834) and was unavailable to serve as basionym for Mitten's proposed combination. So, there is no valid name blocking *Lophocolea australis* Gottsche and Stephani's new name is therefore superfluous.

Lophocolea belmorana Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 117 (1914) ≡ **Leptoscyphus excipulatus** var. **excipulatus**

Original material: Hab. Australia, (Belmore Falls): Watts, 934.

Lophocolea bicuspidata Pearson, Bulletin of Miscellaneous Information 1924: 68 (1924) ≡ **Cryptolophocolea trialata** (Gottsche) L.Söderstr.

Original material: Tasmania: Mt Wellington, Deep Creek Track, 1600 ft, 13 Nov. 1911, *Weymouth 1573* (BM, HO).

Lophocolea bidentata f. *cuspidata* Nees, Naturgeschichte der Europaischen Lebermoose 2: 327 (1836) = **Chiloscyphus cuspidatus** (Nees) J.J.Engel & R.M.Schust.

Lophocolea bispinosa (Hook.f. & Taylor) Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 2: 162 (1845) ≡ **Chiloscyphus bispinosus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Basionym: *Jungermannia bispinosa* Hook.f. & Taylor

Lophocolea bowieana Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 117 (1914) ≡ **Chiloscyphus bowieanus** (Steph.) J.J.Engel & R.M.Schust.

Original material: Insulae Novae Hebridae (Santo) Bowie leg. (Watts, 15).

Published as 'bowiena', but correctable to 'bowieana'.

Lophocolea brevis Steph., Species Hepaticarum 6: 265 (1922) = **Chiloscyphus perpusillus** (Hook.f. & Taylor) J.J.Engel

Original material: Hab. Tasmania (Weymouth legit).

Lophocolea calcarea Steph., Bulletin de l'Herbier Boissier Series 2 6: 884 (1906) ≡ **Chiloscyphus calcareus** (Steph.) J.J.Engel & R.M.Schust.

Original material: Hab. New Zealand (Colenso).

Lophocolea colensoi Mitt., Flora Novae-Zelandiae 2(6): 138 (1854) ≡ **Heteroscyphus colensoi** (Mitt.) Schiffn.

Original material: Hab. Northern Island: on rotten wood, East Coast, Colenso.

Lophocolea cordifolia Steph., Species Hepaticarum 3: 89 (1906) = **Chiloscyphus austrigenus** subsp. **okaritanus** (Steph.) J.J.Engel

Lophocolea cordifolia f. *disticha* Rodway, Tasmanian Bryophyta 2: 46 (1916) = **Clasmatocolea notophylla** (Hook.f. & Taylor) Grolle

Engel & Glenny (2019a) do not discuss the forms of *Lophocolea cordifolia*, so the synonymy of f. *disticha* is here inferred.

Lophocolea corticola Steph., Species Hepaticarum 6: 268 (1922) ≡ **Chiloscyphus subemarginatus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Original material: Hab. Australia orientalis (Weymouth, Pentzke).

Lophocolea cuspidata (Nees) Limpr., Kryptogamen-Flora von Schlesien Flechten 1(2): 303 (1877) ≡ **Chiloscyphus cuspidatus** (Nees) J.J.Engel & R.M.Schust.

Basionym: *Lophocolea bidentata* f. *cuspidata* Nees

Lophocolea dalliana Steph., Bulletin de l'Herbier Boissier Series 2 6: 785 (1906) = **Chiloscyphus semiteres** var. **semiteres**

Original material: Hab. New Zealand (Dall).

Lophocolea dargonia (Gottsche) Steph., Hedwigia 32: 327 (1893) = **Chiloscyphus novae-zeelandiae** var. **meridionalis** (Steph.) J.J.Engel

Basionym: *Chiloscyphus dargonius* Gottsche

Lophocolea decolorata Steph., Bulletin de l'Herbier Boissier Series 2 6: 875 (1906) = **Chiloscyphus perpusillus** (Hook.f. & Taylor) J.J.Engel

Original material: Hab. Tasmania (Weymouth) 'typus in herb. Stephani'.

Lophocolea decurrens Herzog, Transactions of the Royal Society of New Zealand 65: 352 (1935) = **Chiloscyphus herzogii** J.J.Engel & R.M.Schust.

Lophocolea decurva Mitt., Flora Tasmaniae 2(8): 227 (1859) ≡ **Saccogynidium decurvum** (Mitt.) Grolle

Original material: Hab. Amongst Gothchea Lehmanniana, Nees, and Symphyogyna flabellata, N. et M. St. Patrick's River, Gunn.

Lophocolea divaricata Hook.f. & Taylor, London Journal of Botany 5: 367 (1846) ≡ **Chiloscyphus divaricatus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Original material: Hab. Cape Horn, Dr Hooker.

Lophocolea echinella Lindenb. & Gottsche, Synopsis Hepaticarum 5: 703 (1847) ≡ **Heteroscyphus echinellus** (Lindenb. & Gottsche) J.J.Engel & Xiao L.He

Lophocolea erectifolia Steph., Journal of the Linnean Society, Botany 29: 269 (1892) = **Cryptolophocolea pallida** (Mitt.) L.Söderstr.

Original material: Hab. New Zealand (Colenso, Knight).

Lophocolea excipulata Steph., Bulletin de l'Herbier Boissier Series 2 6: 790 (1906) ≡ **Leptoscyphus excipulatus** (Steph.) J.J.Engel

Original material: Hab. Tasmania (Weymouth) 'typus in herb. Stephani'

Lophocolea excipulata f. *humilior* Rodway, Tasmanian Bryophyta 2: 42 (1916) ≡ **Leptoscyphus incomptus** J.J.Engel

Original material: Tasmania: Mt Wellington, 3000 ft, Jan. 1913, *Rodway* (lecto: HO), designated by Engel (2016).

Lophocolea excisifolia Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 118 (1914) ≡ **Chiloscyphus excisifolius** (Steph.) J.J.Engel & R.M.Schust.

Original material: Hab. Australia (Jarrangobilly Caves): Watts, 924a.

Lophocolea exipulata f. *minor* Rodway, Tasmanian Bryophyta 2: 42 (1916) ≡ **Leptoscyphus incomptus** J.J.Engel

Original material: Tasmania: Mt Wellington Plateau, Nov. 1913, *Rodway* (lecto: HO), designated by Engel (2016).

Lophocolea filicicola Steph., Journal of the Linnean Society, Botany 29: 269 (1892) = **Leptoscyphus physanthus** (Hook.f. & Taylor) J.J.Engel

Original material: None cited, but published in 'Colenso's New Zealand Hepaticae'.

Lophocolea fissistipula Steph., Bulletin de l'Herbier Boissier Series 2 6: 886 (1906) = **Chiloscyphus rupicola** (Steph.) J.J.Engel & R.M.Schust.

Original material: Hab. Tasmania (Weymouth) 'typus in herb. Stephani'.

Lophocolea floribunda Steph., Bulletin de l'Herbier Boissier Series 2 6: 886 (1906) = **Chiloscyphus monoicus** J.J.Engel & R.M.Schust.

Original material: Hab. Australia N.S. Wales (Watts) 'typus in herb. Stephani'.

Lophocolea forsythiana Steph., Bulletin de l'Herbier Boissier Series 2 6: 788 (1906) = **Chiloscyphus semiteres** var. **semiteres**

Original material: Hab. New South Wales (Forsyth).

Lophocolea geheebii Steph., Bulletin de l'Herbier Boissier Series 2 6: 787 (1906) = **Chiloscyphus semiteres** var. **semiteres**

Original material: Hab. Australia, Genoa River (Bauerlen leg.) ex Herb. Geheebii.

Lophocolea grandistipula Schiffn., Forschungsr. Gazelle 4: 12 (1890) ≡ **Chiloscyphus novae-zeelandiae** var. **grandistipulus** (Schiffn.) J.J.Engel

Original material: New Zealand: Auckland, 8 Nov. 1875, Naumann.

Lophocolea gunniana Nees, Synopsis Hepaticarum 2: 169 (1845) = **Chiloscyphus austrigenus** subsp. **okaritanus** (Steph.) J.J.Engel

Lophocolea helmsiana Steph., Bulletin de l'Herbier Boissier Series 2 6: 791 (1906) = **Cryptolophocolea helmsiana** (Steph.) L.Söderstr.

Original material: Hab. New Zealand (Insula meridionalis) (Helms).

Lophocolea heterophylloides Nees, Synopsis Hepaticarum 2: 157 (1845) = **Chiloscyphus semiteres** var. **semiteres**

Lophocolea heterophylloides var. *macrocalyx* Pearson, Bulletin of Miscellaneous Information 1924: 68 (1924) = **Chiloscyphus rupicola** (Steph.) J.J.Engel & R.M.Schust.

Original material: Tasmania: south coast, Recherche Bay, near Leprena 18 Jan. 1911, *Weymouth 1525* (BM).

Lophocolea hirtifolia Hook.f. & Taylor, London Journal of Botany 5: 366 (1846) = **Chiloscyphus muricatus** (Lehm.) J.J.Engel & R.M.Schust.

Original material: Hab. With Sticta chloroleuca, Hook. fil. et Tayl. Van Diemen's Land.

Lophocolea hodgsoniae Hamlin, Records of the Dominion Museum 7: 286 (1972) = **Leptoscyphus australis** (Gottsche, Lindenb. & Nees) R.M.Schust.

Replaced synonym: Jungermannia australis Hook.f. & Taylor

Lophocolea howeana Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 118 (1914) ≡ **Chiloscyphus howeanus** (Steph.) J.J.Engel & R.M.Schust.

Original material: Lord Howe Island, Watts 39, November 1911.

Lophocolea humilis (Hook.f. & Taylor) Steph., Bih. Kongl. Svenska Vetensk.-Akad. Handl. 26 (III, 6): 40 (1900) ≡ **Clasmatocolea humilis** (Hook.f. & Taylor) Grolle

Basionym: *Jungermannia humilis* Hook.f. & Taylor

Lophocolea inflexispina (Hook.f. & Taylor) Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 693 (1847) ≡ **Clasmatocolea inflexispina** (Hook.f. & Taylor) J.J.Engel

Lophocolea latifolia Nees, Naturgeschichte der Europaischen Lebermoose 2: 234 (1836) ≡ **Chiloscyphus latifolius** (Nees) J.J.Engel & R.M.Schust.

Original material: Europe.

Lophocolea lauterbachii Steph., Species Hepaticarum 3: 118 (1906) = **Chiloscyphus gippslandicus** J.J.Engel & R.M.Schust.

Original material: Hab. Australia, Gippsland (Lauterbach); Tasmania (Weymouth) 'typus in herb Stephani'.

Lophocolea lenta (Hook.f. & Taylor) Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 2: 162 (1845) ≡ **Chiloscyphus lentus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Basionym: *Jungermannia lenta* Hook.f. & Taylor

Lophocolea leptantha (Hook.f. & Taylor) Gottsche, Lindenb. & Nees, Synopsis Hepaticarium 6: 694 (1847) ≡ **Chiloscyphus leptanthus** (Steph.) J.J.Engel & R.M.Schust.

Basionym: *Jungermannia leptantha* Hook.f. & Taylor

Lophocolea leucophylla (Hook.f. & Taylor) Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 155 (1845) ≡ **Cryptolophocolea leucophylla** (Hook.f. & Taylor) L.Söderstr.

Basionym: *Jungermannia leucophylla* Hook.f. & Taylor

The correct authorship of this name is *Lophocolea leucophylla* (Hook.f. & Taylor) Gottsche, Lindenb. & Nees, as this combination was proposed based on *Jungermannia leucophylla* Hook.f. & Taylor, on p. 155 of Synopsis Hepaticarum. Gottsche, Lindenberg and Nees (1845) indicated their intention to publish a new combination by their indirect reference to the basionym when citing a specimen 'Van Diemens Land, *Jungermannia leucophylla* Taylor in Hb. Greville'. This indirect reference satisfies Art. 41.3. The reference to a specimen Hab. in Van Diemen's land should be interpreted as a new country record, as prior to this the species, as *Jungermannia leucophylla* Hook.f. & Taylor, was known only from Auckland Island.

The nomenclatural acts relevant to the acceptance of *Lophocolea leucophylla* (Hook.f. & Taylor) Gottsche, Lindenb. & Nees as valid occur on two different pages of Species Hepaticarum. Gottsche, Lindenberg and Nees proposed the combination in *Lophocolea*, which they accepted at the time of publication, on page 155. *Lophocolea leucophylla* appeared again on page 181 of the same publication as a synonym of a new combination for *Jungermannia leucophylla* Taylor in *Chiloscyphus*. The intent to publish the new combination in *Lophocolea*, and its synonymisation with a combination in *Chiloscyphus*, appeared on different pages, and are therefore two separate nomenclatural acts completed before the restriction on simultaneous acceptance of alternative names came into effect in 1953. Therefore, we can accept *Lophocolea leucophylla* (Hook.f. & Taylor) Gottsche, Lindenb. & Nees as valid at the time of its first publication in Species Hepaticarum. The combination for *Jungermannia leucophylla* Taylor in *Lophocolea* should therefore be attributed to Gottsche, Lindenb. & Nees, not Mitten.

Lophocolea leucophylla (Hook.f. & Taylor) Mitt., Flora Novae-Zelandiae 2(6): 138 (1854), *nom. illeg.* ≡ **Cryptolophocolea leucophylla** (Hook.f. & Taylor) L.Söderstr.

Basionym: *Jungermannia leucophylla* Hook.f. & Taylor

Lophocolea longiciliata Herzog, Memoranda Societatis pro Fauna et Flora Fennica 27: 96 (1951) ≡ **Chiloscyphus longiciliatus** (Steph.) J.J.Engel & R.M.Schust.

Original material: Tasmania, Wilmot, 1927, Weindorfer 33 (JE)

Lophocolea longistipula Steph., Bulletin de l'Herbier Boissier Series 2 6: 884 (1906) ≡ **Chiloscyphus subemarginatus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Original material: Hab. Tasmania (Moore) 'typus in herb. Stephani.'

Lophocolea macroloba Steph., Bulletin de l'Herbier Boissier Series 2 6: 876 (1906) = **Chiloscyphus perpusillus** (Hook.f. & Taylor) J.J.Engel

Original material: Hab. Tasmania (Weymouth) 'typus in herb. Stephani.'

A holotype likely exists, as only a single specimen is known in herb. Steph., (Art. 9.1). Engel (2010) designates this specimen the lectotype.

Lophocolea macrostipula Steph., Bulletin de l'Herbier Boissier Series 2 6: 888 (1906) = **Chiloscyphus novae-zeelandiae** var. **novae-zeelandiae**

Original material: Hab. Tasmania (Weymouth) 'typus in herb. Stephani.'

A holotype likely exists, as only a single specimen is known in herb. Steph., (Art. 9.1). Engel (2010) designates this specimen the lectotype.

Lophocolea meridionalis Steph., Bulletin de l'Herbier Boissier Series 2 6: 888 (1906) ≡ **Chiloscyphus novae-zeelandiae** var. **meridionalis** (Steph.) J.J.Engel

Original material: Hab. New Zealand (insula meridionalis) Beckett 'typus in herb. Stephani.'

Lophocolea minor Nees, Naturgeschichte der Europaischen Lebermoose 2: 330 (1836) ≡ **Chiloscyphus minor** (Nees) J.J.Engel & R.M.Schust.

Lophocolea mooreana Steph., Bulletin de l'Herbier Boissier Series 2 6: 875 (1906) = **Chiloscyphus cuspidatus** (Nees) J.J.Engel & R.M.Schust.

Original material: Hab. Tasmania (Moore) 'typus in herb. Stephani.'

Lophocolea moorei (Steph.) Steph., Papers and Proceedings of the Royal Society of Tasmania 1902: 128 (1903) ≡ **Heteroscyphus conjugatus** (Mitt.) J.J.Engel & R.M.Schust.

Basionym: *Chiloscyphus moorei* Steph.

Lophocolea muricata (Lehm.) Nees, Synopsis Hepaticarum 2: 169 (1845) = **Chiloscyphus muricatus** (Lehm.) J.J.Engel & R.M.Schust.

Basionym: *Jungermannia muricata* Lehm.

Lophocolea notophylla (Hook.f. & Taylor) E.A.Hodgs., Transactions and Proceedings of the Royal Society of New Zealand 78: 495 (1940) ≡ **Clasmatocolea notophylla** (Hook.f. & Taylor) Grolle

Basionym: *Jungermannia notophylla* Hook.f. & Taylor

Lophocolea novae-zeelandiae (Lehm. & Lindenb.) Nees, Synopsis Hepaticarum 2: 168 (1845) ≡ **Chiloscyphus novae-zeelandiae** var. **novae-zeelandiae**

Basionym: *Jungermannia novae-zeelandiae* Lehm. & Lindenb.

Lophocolea novae-zeelandiae f. *varians* Gottsche, Fragmenta Phytographiae Australiae 11(Suppl.): 56 (1880) = **Leptoscyphus australis** (Gottsche, Lindenb. & Nees) R.M.Schust.

Lophocolea novae-zelandiae f. *varians* is a poorly understood taxon whose status should be assessed with reference to original material as a first step toward improving our knowledge.

Lophocolea okaritana Steph., Species Hepaticarum 3: 85 (1906) ≡ **Chiloscyphus austrigenus** subsp. **okaritanus** (Steph.) J.J.Engel

Lophocolea oldfieldiana Steph., Bulletin de l'Herbier Boissier Series 2 6: 790 (1906) = **Chiloscyphus canaliculatus** var. **canaliculatus**

Original material: Hab. Tasmania (Oldfield) 'typus in herb. Stephani.'

Lophocolea pallida Mitt., Flora Novae-Zelandiae 2(6): 135 (1854) = **Cryptolophocolea pallida** (Mitt.) L.Söderstr.

Original material: Northern Island, Auckland, Sinclair.

Lophocolea paucistipula Rodway, Papers and Proceedings of the Royal Society of Tasmania 1916: 96 (1917) ≡ **Hepatostolonophora paucistipula** (Rodway) J.J.Engel

Original material: Bank of creek near Cradle Mt.

Lophocolea perpusilla (Hook.f. & Taylor) Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 2: 163 (1845) ≡ **Chiloscyphus perpusillus** (Hook.f. & Taylor) J.J.Engel

Basionym: *Jungermannia perpusilla* Hook.f. & Taylor

Lophocolea rara Steph., Species Hepaticarum 6: 290 (1922) ≡ **Chiloscyphus rarus** (Steph.) J.J.Engel & R.M.Schust.

Original material: Hab. Tasmania (Moore legit).

Lophocolea rigens (Hook.f. & Taylor) A.Evans, Bulletin of the Torrey Botanical Club 25: 423 (1898) ≡ **Clasmatocolea rigens** (Hook.f. & Taylor) J.J.Engel

Basionym: *Jungermannia rigens* Hook.f. & Taylor

Lophocolea rivalis (Hook.f. & Taylor) Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 5: 791 (1847) ≡ **Chiloscyphus sabuletorum** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Basionym: *Jungermannia rivalis* Hook.f. & Taylor

Lophocolea rotundistipula Steph., Bulletin de l'Herbier Boissier Series 2 6: 793 (1906) = **Chiloscyphus novae-zeelandiae** var. **grandistipulus** (Schiffn.) J.J.Engel

Original material: Hab. New Zealand (Helms) 'typus in herb. Stephani.'

Lophocolea rupicola Steph., Bulletin de l'Herbier Boissier Series 2 6: 874 (1906) ≡ **Chiloscyphus rupicola** (Steph.) J.J.Engel & R.M.Schust.

Original material: Hab. Tasmania (Weymouth).

Lophocolea sect. *Cyanolophocolea* R.M.Schust., The Hepaticae and Anthocerotae of North America, East of the Hundredth Meridian 4: 238 (1980) = **Heteroscyphus** Schiffn.

Lophocolea sellingii S.W.Arnell, Botaniska Notiser 115: 314 (1962) ≡ **Chiloscyphus novae-zeelandiae** var. **novae-zeelandiae**

Original material: Tasmania: near Targa, c. 15 m. NE of Launceston, St Patricks River, 9 Jan. 1949, *Selling* (S).

Lophocolea semiteres (Lehm.) Mitt., Journal of the Linnean Society, Botany 16: 188 (1877) ≡ **Chiloscyphus semiteres** (Lehm. & Lindenb.) Lehm. & Lindenb.

Basionym: *Jungermannia semiteres* Lehm.

Lophocolea sexdentata Steph., Species Hepaticarum 6: 292 (1922) ≡ **Heteroscyphus coalitus** (Hook.) Schiffn.

Original material: Hab. Tasmania (Oldfield legit.).

Lophocolea spongiosa Steph., Bulletin de l'Herbier Boissier Series 2 6: 939 (1906) = **Chiloscyphus rupicola** (Steph.) J.J.Engel & R.M.Schust.

Original material: Hab. Tasmania (Weymouth) 'typus in herb. Stephani.'

Lophocolea squamata Herzog, Transactions of the British Bryological Society 1: 183 (1949) ≡ **Chiloscyphus semiteres** (Lehm. & Lindenb.) Lehm. & Lindenb.

Lophocolea strongylophylla (Hook.f. & Taylor) E.A.Hodgs., Transactions of the Royal Society of New Zealand 80: 338 (1953) ≡ **Clasmatocolea strongylophylla** (Hook.f. & Taylor) Grolle

Basionym: *Jungermannia strongylophylla* Hook.f. & Taylor

Lophocolea subemarginata Hook.f. & Taylor, London Journal of Botany 5: 367 (1846) ≡ **Chiloscyphus subemarginatus** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Original material: Hab. On bark, Van Diemen's Land, Gunn. Hook. herb.

Lophocolea subporosa Mitt., Flora Novae-Zelandiae 2(6): 137 (1854) ≡ **Chiloscyphus subporosus** (Mitt.) J.J.Engel & R.M.Schust.

Original material: Hab. Northern Island: Auckland, Sinclair; creeping amongst Mosses. Wellington, Stephenson in Herb. Mitten.

Lophocolea subviridis (Hook.f. & Taylor) Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 5: 699 (1847) ≡ **Chiloscyphus subviridis** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Basionym: *Jungermannia subviridis* Hook.f. & Taylor

Lophocolea subviridis was listed as a synonym of *L. novae-zelandiae* by Bastow (1888) in his treatment of Tasmanian hepatics. Engel (2010) rejects this synonymy and is followed here.

Lophocolea tasmanica Mitt., Flora Tasmaniae 2(8): 226 (1859) = **Cryptolophocolea trialata** (Gottsche) L.Söderstr.

Original material: Tasmania, Archer.

Lophocolea textilis (Hook.f. & Taylor) Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 5: 696 (1847) ≡ **Chiloscyphus textilis** (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Basionym: *Jungermannia textilis* Hook.f. & Taylor

Lophocolea triacantha Hook.f. & Taylor, London Journal of Botany 5: 368 (1846) ≡ **Heteroscyphus triacanthus** (Hook.f. & Taylor) Schiffn.

Lophocolea trialata Gottsche, Linnaea 28: 552 (1856) ≡ **Chiloscyphus trialatus** (Gottsche) J.J.Engel & R.M.Schust.

Original material: Australia felix, Alpes australes.

Lophocolea tumida Steph., Bulletin de l'Herbier Boissier Series 2 6: 791 (1906) = **Clasmatocolea notophylla** (Hook.f. & Taylor) Grolle

Original material: Hab. Tasmania, Mt La Perouse, Oldfield 'in herb. Stephani.'

Lophocolea variabilis Steph., Bulletin de l'Herbier Boissier Series 2 6: 885 (1906), *nom. illeg.* = **Chiloscyphus rupicola** (Steph.) J.J.Engel & R.M.Schust.

Original material: Hab. New Zealand, Mt Eden, Kirk.

Lophocolea varians Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 119 (1914) ≡ **Heteroscyphus varians** (Steph.) J.J.Engel

Original material: Hab. Australia (Ferny Hill, Mt Wilson): Watts, 1080.

Lophocolea verrucosa Steph., Bulletin de l'Herbier Boissier Series 2 6: 938 (1906) = **Cryptolophocolea leucophylla** (Hook.f. & Taylor) L.Söderstr.

Original material: Hab. Tasmania (Moore, Weymouth) 'typus in herb. Stephani.'

Lophocolea villosa Mitt. ex Steph., Species Hepaticarum 6: 299 (1922) ≡ **Chiloscyphus villosus** (Mitt. ex Steph.) J.J.Engel & R.M.Schust.

Original material: Hab. Nova Zelandia (Colenso legit).

Lophocolea wattsiana Steph., Bulletin de l'Herbier Boissier Series 2 6: 936 (1906) = **Chiloscyphus canaliculatus** var. **canaliculatus**

Original material: Hab. Australia, Richmond River (Watts) 'typus in herb. Stephani.'

Lophocolea weymouthiana Steph., Bulletin de l'Herbier Boissier Series 2 6: 939 (1906)

Original material: Hab. Tasmania (Weymouth).

Lopholejeunea (Spruce) Steph., Botanical Gazette 15: 285 (1890), *nom. cons.*

Basionym: *Lejeunea* subg. *Lopholejeunea* Spruce

Lopholejeunea australis Steph., Species Hepaticarum 5: 96 (1912) ≡ **Lopholejeunea muelleriana** var. **australis** (Steph.) B.M.Thiers & Gradst.

Original material: Hab. Australia (New South Wales).

#Lopholejeunea colensoi Steph., Journal of the Linnean Society, Botany 29: 268 (1892)

Original material: None cited, but gathered in New Zealand by Colenso.

Lopholejeunea colensoi was reported for Australia by Thiers and Gradstein (1989) on the basis of a single specimen attributed, without specific locality, to Australia and gathered by Bidwill. This specimen is undoubtedly *Lopholejeunea colensoi*. However, it represents the only known gathering from Australia, and was made by a collector who also collected in New Zealand, where *Lopholejeunea colensoi* is widespread. We suggest that the geographical origins of Bidwill's specimen have been confused and exclude *Lopholejeunea colensoi* from the Australian flora.

Lopholejeunea eulopha (Taylor) Schiffn., Hepaticae. Die Naturlichen Pflanzenfamilien 1(3): 129 (1893)

Basionym: *Lejeunea eulopha* Taylor

Lopholejeunea fimbriata (Gottsche) Schiffn., Hepaticae. Die Naturlichen Pflanzenfamilien 1(3): 129 (1893) = **Lopholejeunea eulopha** (Taylor) Schiffn.

Basionym: *Lejeunea fimbriata* Gottsche

Lopholejeunea grossealata Steph., Species Hepaticarum 5: 95 (1912)

Original material: Hab. Australia orientalis. Cambewarra.

Lopholejeunea herzogiana Verd., Recueil des Travaux Botaniques Neerlandais 30: 217 (1933)

Original material: Indonesia, Java, Prov. Preanger, Tjibodas, 'ad arborum truncos', 1420 m, 1894, Schiffner s.n.

Lopholejeunea hispidissima Steph., Species Hepaticarum 5: 80 (1912)

Lopholejeunea javanica (Nees) Schiffn., Hepaticae. Die Naturlichen Pflanzenfamilien 1(3): 129 (1893)

Basionym: *Lejeunea javanica* Nees

Lopholejeunea knightii Steph., Hepaticarum species novae IX. Hedwigia 35: 110 (1896) = **Lopholejeunea plicatiscypha** (Hook.f. & Taylor) Steph.

Original material: Hab. Nova Zelandiae (Knight, Kirk)

Lopholejeunea loheri Steph., Species Hepaticarum 5: 77 (1912)

Original material: Hab. Insula Luzon.

Lopholejeunea muelleriana (Gottsche) Schiffn., Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie 23: 599 (1897)

Basionym: *Lejeunea muelleriana* Gottsche

Lopholejeunea muelleriana (Gottsche) Steph., Hedwigia 29: 139 (1890), *nom. inval.* = **Lopholejeunea muelleriana** (Gottsche) Steph.

Basionym: *Lejeunea muelleriana* Gottsche

Lopholejeunea muelleriana var. **australis** (Steph.) B.M.Thiers & Gradst., Memoirs of the New York Botanical Garden 52: 33 (1989)

Basionym: *Lopholejeunea australis* Steph.

Lopholejeunea nigricans (Lindenb.) Schiffn., Conspectus Hepaticarum Archipelagi Indici: 293 (1898)

Basionym: *Lejeunea nigricans* Lindenb.

Lopholejeunea norfolkiensis Steph., Species Hepaticarum 5: 96 (1912) = **Lopholejeunea eulopha** (Taylor) Schiffn.

Original material: Hab. Australia. Norfolk Island.

Lopholejeunea norfolkiensis Steph., Hedwigia 28: 175 (1889), *nom. inval.* = **Lopholejeunea eulopha** (Taylor) Schiffn.

Original material: Hab. Norfolk Island. leg. Robinson.

Genus not valid at time of publication.

#Lopholejeunea plicatiscypha (Hook.f. & Taylor) Steph., Species Hepaticarum 5: 96 (1912)

Basionym: *Phragmicoma plicatiscypha* Hook.f. & Taylor

The operational circumscription of *Lopholejeunea plicatiscypha* included several disparate morphotypes. The morphotype corresponding with the original material of *Phragmicoma plicatiscypha* is always a rheophyte on basalt within the flood zone of forest streams in northern New Zealand. This morphotype is distinct in the distinct broad, more or less entire perianth wings illustrated in Fig. 13d of Thiers and Gradstein (1989). It also consistently develops obpyriform lobules, unlike the plant illustrated as *Lopholejeunea plicatiscypha* from Australia (Fig. 13a of Thiers and Gradstein 1989). No material corresponding with *Lopholejeunea plicatiscypha* in the strict sense is known from Australia, and this species is therefore excluded from the Australian flora. *Lopholejeunea plicatiscypha* is endemic to New Zealand.

Lopholejeunea streimannii B.M.Thiers & Gradst., Memoirs of the New York Botanical Garden 52: 37 (1989)

Original material: Queensland: North Coast Region: Barron State Forest, Herberton Range, 13 km S of Atherton, 1000 m, 17°23′S, 145°37′E, 2 Mar. 1983, *Streimann 27212* (holo: CBG).

Lopholejeunea subfusca (Nees) Schiffn., Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie 23: 593 (1897)

Basionym: *Jungermannia subfusca* Nees

Lophozia (Dumort.) Dumort., Recueil d'Observations sur les Jungermanniacees: 17 (1835)

Basionym: *Jungermannia* sect. *Lophozia* Dumort.

Lophozia bidens Mitt. ex Steph., Species Hepaticarum 2: 141 (1902) ≡ **Andrewsianthus bidens** (Mitt. ex Steph.) R.M.Schust.

Original material: Hab. Java in Monte Pangerango (Motley).

Lophozia herzogiana E.A.Hodgs. & Grolle, Review Bryologie Lichenologie 31: 152 (1962) ≡ **Protolophozia herzogiana** (E.A.Hodgs. & Grolle) Váňa & L.Söderstr.

Original material: N of Rotorua, near Atiamuri, 1931, Allison (holotype MPN 19439 ex herb. Hodgson no. 11881, isotype CHR ex herb. Allison H2528).

Lophozia marionensis S.W.Arnell, Svensk Botanische Tidskrift 47: 421 (1953) ≡ **Andrewsianthus marionensis** (S.W.Arnell) Grolle

Original material: Marion Island: Ridges between Transvaal Cove and Trypot Beach, 6 Mar. 1952, *R.W. Rand 3575* (holo: BOL).

Lophozia subg. *Protolophozia* R.M.Schust., Nova Hedwigia 15(2–4): 472 (1968) ≡ **Protolophozia** (R.M.Schust.) Schljakov

Lophozia tasmanica R.M.Schust., Nova Hedwigia 15: 484 (1968) ≡ **Protolophozia tasmanica** (R.M.Schust.) Váňa & L.Söderstr.

Original material: Tasmania: Above Camp Creek, Surprise Valley, Lyell Hwy., between Derwent Bridge and Queenstown, ca. 2–3 mi. W. of King William Saddle, ca. 2,000 ft., *Schuster RMS 50261*.

Lunularia Adans., Familles des Plantes 2: 15 (1763)

Lunularia cruciata (L.) Dumort., Hepaticae Europae. Jungermannidae Europae: 147 (1874)

Basionym: *Marchantia cruciata* L.

Lunularia vulgaris Micheli ex Raddi, Opuscoli Scientifici 2(6): 355 (1818), *nom. illeg.* = **Lunularia cruciata** (L.) Dumort.

Madotheca crawfordii (Steph.) Steph., Species Hepaticarum 4: 283 (1910) ≡ **Porella crawfordii** Steph.

Basionym: *Porella crawfordii* Steph.

Madotheca elegantula Mont., Annales des Sciences Naturelles; Botanique 20: 255 (1843) ≡ **Porella elegantula** (Mont.) E.A.Hodgs.

Original material: Hab. in insulis Auckland ad terram, ad cortices et ad Stictam Richardi Nob. parasitantem invenit cl. Hombron.

Madotheca godofrediana Gottsche, Fragmenta Phytographiae Australiae 11(Suppl.): 63 (1880), *nom. inval.* = **Porella crawfordii** Steph.

Madotheca queenslandica Steph., Species Hepaticarum 4: 283 (1910) = **Porella crawfordii** Steph.

Original material: Hab. Australia subtropica (Queensland).

Madotheca stangeri Lindenb. & Gottsche, Synopsis Hepaticarum 2: 280 (1845) = **Porella elegantula** (Mont.) E.A.Hodgs.

Original material: Habitat in Nova Zeelandia a et B (Dr. Stanger in Hb. Gourlie. et Gottsche), ad portum Dusky Bay legit formam a. Menzies (Hb. Hk., L. et Lg.), var. g in Insulis Auckland ad terram et in cortice (Hombron).

Madotheca viridissima Mitt. Flora Vitiensis 411 (1871) = **Porella viridissima** (Mitt.) Grolle

Original material: Samoa (Powell! n. 161).

Marchantia L., Species Plantarum 2: 1137 (1753)

Marchantia berteroana Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 6: 21 (1834)

Marchantia cephaloscypha Steph., Hedwigia 22: 51 (1883) = **Marchantia berteroana** Lehm. & Lindenb.

Marchantia commutata Lindenb., Synopsis Hepaticarum Europaearum: 101 (1829) ≡ **Marchantia quadrata** Scopoli

Basionym: *Preissia commutata* (Lindenb.) Nees

Marchantia cruciata L., Species Plantarum 2: 1137 (1753) ≡ **Lunularia cruciata** (L.) Dumort.

Original material: Habitat in Europae umbrosis.

Marchantia foliacea Mitt., Flora Novae-Zelandiae 2(7): 168 (1855)

Marchantia fusca Steph., Species Hepaticarum 1: 174 (1900) = **Marchantia foliacea** Mitt.

Marchantia hemisphaerica L., Species Plantarum 2: 1138 (1753) ≡ **Reboulia hemisphaerica** (L.) Raddi

Original material: Habitat in Europe paludosus.

Marchantia hirsuta Schwägr., Nova Genera & Species Plantarum seu Prodromus: 145 (1788) ≡ **Dumortiera hirsuta** (Schwägr.) Nees

Original material: Jamaica.

Marchantia pallida Steph., Hedwigia 28: 266 (1889) = **Marchantia pileata** Mitt.

Marchantia paludicola Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 120 (1914) = **Marchantia berteroana** Lehm. & Lindenb.

Marchantia pileata Mitt., Flora Novae-Zelandiae 2(7): 169 (1855)

Marchantia polymorpha L., Species Plantarum 2: 1137 (1753)

Original material: in Europa juxta locis umbrosis.

Marchantia polymorpha var. **aquatica** Nees, Naturgeschichte der Europaischen Lebermoose 4: 65 (1838)

Marchantia quadrata Scopoli, Flora carniolica. Tom. II. Editio secunda. Joannis Pauli Krauss, Viennae, 496 pp.

Marchantia subg. **Preissia** (Corda) D.G. Long, Crand.-Stotl., L.L.Forrest & J.C.Villarreal, Phytotaxa 252(1): 78 (2016)

Basionym: *Preissia* Corda

Marchantia tabularis Nees, Naturgeschichte der Europaischen Lebermoose 4: 71 (1838) = **Marchantia berteroana** Lehm. & Lindenb.

Marchantia tasmanica Steph. ex Bonner, Candollea 14: 111 (1953) = **Marchantia foliacea** Mitt.

Marchantia tenella L., Species Plantarum 2: 1137 (1753) ≡ **Asterella tenella** (L.) P.Beauv.

Original material: Habitat in Virginia. D. Gronovius.

Marchantia wattsiana Steph. ex Bonner, Candollea 14: 112 (1953) = **Marchantia pileata** Mitt.

Marsupella Dumort., Commentationes Botanicae: 114 (1822)

Marsupella sparsifolia (Lindb.) Dumort., Bulletin de la Societe Royale de Botanique de Belgique 13: 128 (1874)

Basionym: *Sarcoscyphus sparsifolium* Lindb.

Marsupella sparsifolia subsp. *childii* R.M.Schust., Journal of the Hattori Botanical Laboratory 80: 61 (1996), *nom. inval.*

Marsupella sparsifolia subsp. **childii** R.M.Schust. ex Váňa & L. Söderstr., Phytotaxa 183: 288 (2014)

Original material: New Zealand: Fiordland Nat. Park: Margin of tarn, snow tussock zone, Mt. Burns track, *Schuster 84-142* (holo: F).

Marsupidium Mitt., Handbook of the New Zealand Flora 2: 751 (1867) = **Acrobolbus** Nees

Marsupidium epiphytum Colenso, Transactions and Proceedings of the New Zealand Institute 21: 64 (1889) ≡ **Acrobolbus epiphytus** (Colenso) Briscoe

Marsupidium grossitextum Steph., Species Hepaticarum 6: 446 (1924) ≡ **Goebelobryum grossitextum** (Steph.) Grolle

Original material: Hab. Australia occidentalis : Bayswater (Goebel legit).

Marsupidium knightii Mitt., Handbook of the New Zealand Flora 2: 753 (1867) ≡ **Acrobolbus knightii** (Mitt.) Briscoe

Original material: New Zealand, Knight.

Marsupidium piliferum Steph., Bulletin de l'Herbier Boissier Series 2 8: 602 (1908) = **Pseudomarsupidium piliferum** (Steph.) Herzog ex Grolle

Original material: Hab. Australia. New South Wales (Ferd. von Müller); Chile. Corral. (Krause).

Marsupidium setulosum (Mitt.) Mitt., Handbook of the New Zealand Flora 2: 753 (1867) ≡ **Acrobolbus setulosus** (Mitt.) Briscoe

Basionym: *Gymnanthe setulosa* Mitt.

Marsupidium surculosum (Nees) Schiffn., Hepaticae. Die Naturlichen Pflanzenfamilien 1(3): 100 (1893) ≡ **Acrobolbus surculosus** (Nees) Trevis.

Basionym: *Scapania surculosa* Nees

Mastigobryum accretum Lehm. & Lindenb., Synopsis Hepaticarum 2: 222 (1845) ≡ **Bazzania accreta** (Lehm. & Lindenb.) Trevis.

Original material: Habitat in Nova Hollandia (Hb. Hk.).

Mastigobryum affine Mitt., Flora Novae-Zelandiae 2(6): 147 (1854), *nom. illeg.* = **Bazzania mittenii** (Steph.) Steph.

Original material: HAB. Northern Island: with M. convexum, amongst Jungermannia monodon, Tararua and Tehawera mountains, Colenso.

Mastigobryum baileyanum Steph., Bulletin de l'Herbier Boissier Series 2 8: 854 (1908) ≡ **Bazzania adnexa** var. **adnexa**

Original material: none cited.

Published as 'bayleyanum' in honor of F.M. Bailey, the epithet is correctable to baileyanum in accordance with Art. 60.8.

Mastigobryum bancanum Sande Lac., Annales Musei Botanici Lugduno-Batavi 1: 301 (1864) ≡ **Acromastigum bancanum** (Sande Lac.) A.Evans

Original material: Hab. Banca, in m. Maras, altit. 2000': van Diest.

Mastigobryum caudistipulum Steph., Bulletin de l'Herbier Boissier, sér. 2, 8(12): 945. 1908. ≡ **Bazzania caudistipula** (Steph.) Inoue & H.A.Mill.

Original material: Hab. Viti-Levu (Graeffe).

Mastigobryum colensoanum Mitt., Flora Novae-Zelandiae 2(6): 147 (1854) ≡ **Acromastigum colensoanum** (Mitt.) A.Evans ex Reimers

Mastigobryum corbierei Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 122 (1914) ≡ **Bazzania corbierei** (Steph.) Meagher

Original material: Hab. Australia, (Kingwell, Wyong): Watts 971b.

Published as 'corbieri' in honour of Louis Corbiere, the epithet is correctable to corbierei in accordance with Art. 60.8.

Mastigobryum densum Sande Lac., Nederlandsch Kruidkundig Archief. Verslangen en Mededelingen der Nederlandsche Botanische Vereeniging 3: 418 (1854)[1855] ≡ **Bazzania densa** (Sande Lac.) Schiffn.

Original material: none cited.

Mastigobryum dentistipulum Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 122 (1914) = **Bazzania adnexa** var. **adnexa**

Original material: Hab. Australia, New South Wales (Lane Cove River and Valley of Waters): Watts. 1096, 1129, 1104.

Mastigobryum divaricatum Nees, Synopsis Hepaticarum 1: 219 (1844) ≡ **Acromastigum divaricatum** (Nees) A.Evans ex Reimers

Original material: Habitat in Java insula inter muscos rarum (Blume in Hb. N.).

Mastigobryum divaricatum var. *muellerianum* Gottsche, Linnaea: ein Journal für die Botanik in ihrem ganzen Umfange, oder Beiträge zur Pflanzenkunde 28: 556 (1856) = **Acromastigum colensoanum** (Mitt.) A.Evans ex Reimers

Original material: Frustulum tantum inter alias Hepaticas repens inveni.

Mastigobryum divaricum Bastow, Papers and Proceedings of the Royal Society of Tasmania 1887: 255 (1888), *orth. var.* = **Acromastigum divaricatum** (Nees) A.Evans ex Reimers

In his treatment of this name Bastow cites 'Syn. Hep. 219 v. 16', a clear reference to the Nees species *Mastigobryum divaricatum*.

Mastigobryum divaricum var. *muellire* Bastow, Papers and Proceedings of the Royal Society of Tasmania 1887: 255 (1888), *orth. var.* = **Acromastigum divaricatum** (Nees) A.Evans ex Reimers

In his treatment of this name Bastow cites 'Syn. Hep. 219 v. 16', a clear reference to the Nees species *Mastigobryum divaricatum*.

Mastigobryum echinatiforme De Not., Epatiche di Borneo: 38 (1874) ≡ **Acromastigum echinatiforme** (De Not.) A.Evans

Mastigobryum echinatum Gottsche, Synopsis Hepaticarum 2: 218 (1845) ≡ **Acromastigum echinatum** (Gottsche) A.Evans

Original material: Habitat in Sincapore (Wallich in Hb. Hk.); van Diemens Land! Dr. Spence 1824 in Hb. Greville).

Mastigobryum elegans Colenso, Transactions and Proceedings of the New Zealand Institute 19: 288 (1887) = **Bazzania involuta** (Mont.) Trevis.

Original material: Hab. In dry craggy Fagus woods, growing compactly together on the ground with Bartramia readeriana, but only observed in two or three spots ; banks of the River Mangatawhainui, near Norsewood, County of Waipawa ; 1881-86: W.C.

Mastigobryum erosifolium Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 122 (1914) = **Acromastigum colensoanum** (Mitt.) A.Evans ex Reimers

Original material: Hab. Australia (Cambewarra Mountain): Watts legit, 917.

Mastigobryum exiguum Steph., Hedwigia 25: 6 (1886) ≡ **Acromastigum exiguum** (Steph.) A.Evans

Mastigobryum fallax Sande Lac., Annales Musei Botanici Lugduno-Batavi 1: 304. 1864 ≡ **Bazzania fallax** (Sande Lac.) Schiffn.

Original material: Hab. Iava; Sumatra; Borneo, in m.Sakoembang: Korthals. — Banca, in m.Maras, altit. 2000': van Diest.

Mastigobryum fasciculatum Steph., Bulletin de l'Herbier Boissier Series 2 8: 748 (1908) ≡ **Bazzania fasciculata** (Steph.) Meagher

Original material: Hab. Australia, Sydney (Goebel).

Mastigobryum francianum Steph., Species Hepaticarum 6: 463. 1924. '*francanum*' ≡ **Bazzania franciana** (Steph.) N.Kitag.

Original material: Hab. Nova Caledonia (Franc legit).

Published as 'francanum', correctable to 'francianum' in accordance with Art. 60.8(d).

Mastigobryum gedeanum Steph., Species Hepaticarum 3: 540. 1909. ≡ **Bazzania gedeana** (Steph.) Meijer

Original material: Hab. Philippinae, Insula Pollilo (Macgregor legit).

Mastigobryum gracillimum Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 123 (1914) = **Bazzania corbierei** (Steph.) Meagher

Original material: Hab. Australia, New South Wales, (Wyong, and Valley of Waters): Watts, 939, 987.

Mastigobryum hochstetteri Reichardt, Verhandlungen der Kaiserlich-Königlichen Zoologisch-Botanischen Gesellschaft in Wien 16: 959 (1866) ≡ **Bazzania hochstetteri** (Reichardt) E.A.Hodgs.

Original material: Neu-Seelaud. An alten Stämmen in Wäldern um Coromaudel; leg. v. Hochstetter.

Mastigobryum integrifolium Austin, Botanical Gazette 1: 32 (1875) = **Acromastigum integrifolium** (Austin) A.Evans

Original material: With Sendtnera juniperina, Sandwich Islands, Baldwin; very rare.

The original material of *Mastigobryum integrifolium* is from Sandwich Islands, but is not *Isolembidium anomalum* in whose synonymy the species appears in McCarthy (2003), which is a southern temperate Australasian endemic (Engel and Glenny 2008).

Mastigobryum intermedium Gottsche & Lindenb., Species Hepathicarum (fasc. 8–11): 82 (1851) ≡ **Bazzania intermedia** (Gottsche & Lindenb.) Trevis.

Mastigobryum javanicum Sande Lac., Nederlandsch Kruidkundig Archief. Verslangen en Mededelingen der Nederlandsche Botanische Vereeniging 3: 418 (1854)[1855] ≡ **Bazzania javanica** (Sande Lac.) Schiffn.

Original material: none cited but published in 'Novae Species Hepaticaum ex Insula Java detexit Dr F. Junghuhn'

Mastigobryum mittenii Steph., Hedwigia 25: 245 (1886) ≡ **Bazzania mittenii** (Steph.) Steph.

Replaced synonym: *Mastigobryum affine* Mitt.

Mastigobryum morokense Steph., Bulletin de l'Herbier Boissier, sér. 2, 8: 765 (1908) ≡ **Bazzania morokensis** (Steph.) Grolle

Original material: Hab. Nova Guinea, Moroka (Loria).

Mastigobryum novae-hollandiae (Nees ex Hook.f. & Taylor) Nees, Synopsis Hepaticarum 2: 221 (1845) = **Bazzania adnexa** var. **adnexa**

Basionym: *Jungermannia novae-hollandiae* Nees ex Hook.f. & Taylor

Mastigobryum novae-zelandiae Mitt., Flora Novae-Zelandiae 2(6): 148 (1854) ≡ **Bazzania novae-zelandiae** (Mitt.) Besch. & C.Massal.

Original material: Hab. Northern Island : forests, Tehawera and Tararua, growing with Saccogyna australis, Colenso.

Mastigobryum parisii Steph., Bulletin de l'Herbier Boissier, sér. 2, 8: 769 (1908) ≡ **Bazzania parisii** (Steph.) N.Kitag.

Original material: Hab. Nova Caledonia (Lerat).

Mastigobryum serpentinum (Nees) Nees, Synopsis Hepaticarum (fasc. 2): 233. 1845. = **Bazzania serpentina** (Nees) Trevis.

Basionym: *Jungermannia serpentina* Nees

Mastigobryum sieberianum Lindenb., Synopsis Hepaticarum 2: 222 (1845) = **Bazzania adnexa** var. **adnexa**

Original material: Habitat in Nova Hollandia (Sieber coll. n. 53).

Mastigobryum subtile Sande Lac., Hepaticae. Annales Musei Botanici Lugduno-Batavi 1(10): 302 (1864) ≡ **Bazzania subtilis** (Sande Lac.) Trevis.

Original material: Hab. lava: in m. Gede et Salak: Teysmann. — Samatra: Korthals.

Mastigobryum tenax Steph., Species Hepaticarum 6: 483 (1924) ≡ **Acromastigum tenax** (Steph.) A.Evans

Original material: Hab. Nova Caledonia (Lerat legit).

Mastigobryum tridens (Reinw., Blume & Nees) Nees, Synopsis Hepaticarum (fasc. 2): 227. 1845. ≡ **Bazzania tridens** (Reinw., Blume & Nees) Trevis.

Basionym: *Jungermannia tridens* Reinw., Blume & Nees

Mastigobryum uncigerum (Reinw., Blume & Nees) Nees, Synopsis Hepaticarum (fasc. 2): 233 (1845) ≡ **Bazzania uncigera** (Reinw., Blume & Nees) Trevis.

Basionym: *Jungermannia uncigera* Reinw., Blume & Nees

Mastigobryum verticale Steph., Bulletin de l'Herbier Boissier, sér. 2, 8(10): 765 (1908) ≡ **Acromastigum verticale** (Steph.) E.A.Hodgs.

Mastigobryum vittatum Gottsche, Synopsis Hepaticarum 2: 216 (1845) ≡ **Bazzania vittata** (Gottsche) Trevis.

Original material: Habitat in Java insula ad muscos et filices repens (Haskarl in Hb. N.).

Mastigobryum wattsianum Steph., Bulletin de l'Herbier Boissier Series 2 8: 474 (1908) ≡ **Bazzania wattsiana** (Steph.) Meagher

Original material: Hab. Australia. New South Wales, Richmond Falls (Watts).

Mastigobryum wattsianum Steph., Bulletin de l'Herbier Boissier, sér. 2, 8(11): 850. 1908. ≡ **Bazzania wattsiana** (Steph.) Meagher

Original material: Hab. Australia New South Wales, Richmond Falls (Watts).

Mastigolejeunea (Spruce) Steph., Hepaticae. Die Naturlichen Pflanzenfamilien 1(3): 120 (1893) = **Thysananthus** subg. **Mastigolejeunea** (Spruce) Sukkharak & Gradst.

Basionym: *Lejeunea* subg. *Mastigolejeunea* Spruce

Mastigolejeunea auriculata (Wilson & Hook.) Steph., Botanical Gazette 17: 171 (1892) ≡ **Thysananthus auriculatus** (Wilson & Hook) Sukkharak & Gradst.

Basionym: *Jungermannia auriculata* Wilson & Hook.

See Söderström et al. (2015) for publication history.

Mastigolejeunea calcarata (Steph.) Verd., Blumea 1: 218, 230 (1934) ≡ **Thysananthus calcaratus** (Steph.) Sukkharak & Gradst.

Basionym: *Archilejeunea calcarata* Steph.

Mastigolejeunea humilis (Gottsche) Schiffn., Hepaticae. Die Naturlichen Pflanzenfamilien 1(3): 129 (1893) ≡ **Thysananthus humilis** (Gottsche) Sukkharak & Gradst.

Basionym: *Phragmicoma humilis* Gottsche

Mastigolejeunea indica Steph., Species Hepaticarum 4: 776 (1912) ≡ **Thysananthus indicus** (Steph.) Sukkharak & Gradst.

Original material: Hab. India orientalis, Insulae Nicobarae.

Mastigolejeunea ligulata (Lehm. & Lindenb.) Schiffn., Hepaticae. Die Naturlichen Pflanzenfamilien 1(3): 129 (1893) ≡ **Thysananthus ligulatus** (Lehm. & Lindenb.) Sukkharak & Gradst.

Basionym: *Jungermannia ligulata* Lehm. & Lindenb.

Mastigolejeunea phaea Gottsche ex Schiffn., Hepaticae. Die Naturlichen Pflanzenfamilien 1(3): 129 (1893) = **Spruceanthus thozetianus** (Gottsche & F.Muell.) B.M.Thiers & Gradst.

Original material: Hab. Rockhampton. Herb. Mus. phyto. Melbourne planta [male]; inflor. [female] in icone Gottschei tantum visa (ex monte Bellender Ker.).

The original material of *Mastigolejeunea phaea* was probably collected by Walter Hill, given collection details provided in Fragmenta Phytographiæ Australiæ 11(suppl. 4): 63 (1880).

Mastigolejeunea repleta (Taylor) A.Evans, Memoirs of the Torrey Botanical Club 8: 131 (1902) ≡ **Thysananthus repletus** (Taylor) Sukkharak & Gradstein

Basionym: *Lejeunea repleta* Taylor

Mastigolejeunea undulata Gradst. & Grolle, Mensch, Kultur und Umwelt im Zentralen Bergland von West-Neuguinea 7: 13 (1981) = **Thysananthus frauenfeldii** Reichardt

Original material: Type: Indonesia: West Papua: *Eipomek-Tal, Hiepko & Schultze-Motel 2266* (holo: B!; iso: JE!, U!).

Mastigolejeunea virens (Angstr.) Steph., Species Hepaticarum 4: 776 (1912) ≡ **Thysananthus virens** Angstr.

Basionym: *Thysananthus virens* Angstr.

Mastigolejeunea wattsiana Steph., Species Hepaticarum 4: 780 (1912) = **Thysananthus ligulatus** (Lehm. & Lindenb.) Sukkharak & Gradst.

Original material: Hab. Australia. New South Wales.

Mastigophora Nees, Naturgeschichte der Europaischen Lebermoose 3: 89 (1838), *nom. cons.*

Mastigophora diclados (Brid. ex F.Weber) Nees, Naturgeschichte der Europaischen Lebermoose 3: 18 (1838)

Basionym: *Jungermannia diclados* Brid. ex F.Weber

Mastigophora lindenbergii (Gottsche) Trevis., Memorie del Reale Istituto Lombardo di Scienze e Lettere, Serie 3, Classe di Scienze Matematiche e Naturali 4(13): 416. 1877. ≡ **Tricholepidozia lindenbergii** (Gottsche) E.D.Cooper

Basionym: *Lepidozia lindenbergii* Gottsche

Megaceros Campb., Annals of Botany (London) 21(4): 484 (1907)

Megaceros austronesophilus Cargill & Seppelt, Australian Systematic Botany 26: 372 (2013)

Original material: Macquarie Island: Green Gorge basin, east end of lae, 28 Nov. 1979, *R. Seppelt 6921* (ADT, CANB).

Megaceros carnosus (Steph.) Steph., Species Hepaticarum 5: 954 (1916) = **Megaceros gracilis** (Reichardt) Steph.

Basionym: *Anthoceros carnosus* Steph.

Megaceros crassus Steph., Species Hepaticarum 5: 955 (1916) = **Megaceros gracilis** (Reichardt) Steph.

Original material: Hab. Tasmania.

#Megaceros denticulatus (Lehm.) Steph., Species Hepaticarum 5: 956 (1916)

Basionym: *Anthoceros denticulatus* Lehm.

Megaceros denticulatus does not occur in Australia.

Megaceros flagellaris (Mitt.) Steph., Species Hepaticarum 5: 951 (1916)

Basionym: *Anthoceros flagellaris* Mitt.

Megaceros gracilis (Reichardt) Steph., Species Hepaticarum 5: 955 (1916)

Basionym: *Anthoceros gracilis* Reichardt

#Megaceros pellucidus (Colenso) E.A.Hodgs., Journal of the Royal Society of New Zealand 2: 115 (1972)

Basionym: *Anthoceros pellucidus* Colenso

Megaceros pellucidus does not occur in Australia.

Metahygrobiella R.M.Schust., The Bryologist 64: 205 (1961) = **Cephalozia** (Dumort.) Dumort.

Metahygrobiella macgregori (Steph.) R.M.Schust., The Bryologist 64: 206 (1961) ≡ **Cephalozia macgregorii** (Steph.) Váňa

Basionym: *Hygrobiella macgregorii* Steph.

Metalejeunea Grolle, Bryophytorum Bibliotheca 48: 17 (1995)

Metalejeunea cucullata (Reinw., Blume & Nees) Grolle, Bryophytorum Bibliotheca 48: 100 (1995)

Basionym: *Jungermannia cucullata* Reinw., Blume & Nees

Metzgeria Raddi, Jungermanniografa Etrusca: 34 (1818)

Metzgeria antarctica Steph. & Watts, Journal and Proceedings of the Royal Society of New South Wales 48: 126 (1914), *nom. inval.* = **Metzgeria leptoneura** Spruce

Metzgeria atrichoneura Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 556 (1885) = **Metzgeria leptoneura** Spruce

Original material: Hab. Nova Zelandia, supra muscos repens.

Metzgeria australis Steph., Hedwigia 28: 267 (1889)

Original material: Hab. Lord Howe's Island. Chev. de Camera 1882 Gippsland leg.? 1888. Shoalhaven leg.? 1884. Port Phillip. Lachmann and French 1886. Roger's Creek. Bauerlen 1886.

Metzgeria colensoi Steph., Species Hepaticarum 6: 49 (1917) = **Metzgeria leptoneura** Spruce

Original material: Hab. Nova Zelandia. (Colenso legit).

Metzgeria concavula Pearson, Kew Bulletin 2: 73 (1924) = **Metzgeria leptoneura** Spruce

#Metzgeria conjugata Lindb., Acta Societatis Scientiarum Fennicae 10: 495 (1875)

So (2002: 619) states 'Several collections from Tasmania, located in HO, were identified as *M. conjugata* Lindenb. by L. Rodway, but these plants with paired falcate hairs belong to *M. leptoneura*'. She does not otherwise mention *Metzgeria conjugata*. We take this as an implicit exclusion of this boreal species from the Australian flora. Residual specimens in Australian herbaria labelled as *Metzgeria conjugata* were determined at the turn of the 20th Century and also likely represent misidentifications of other species such as *M. leptoneura*.

Metzgeria consanguinea Schiffn., Nova Acta Academiae Caesareae Leopoldino-Carolinae Germanicae Naturae Curiosorum. Verhandlungen der Kaiserlich Leopoldinisch-Carolinischen Deutschen Akademie der Naturforscher 60: 271 (1893)

Original material: Habit. Java, in summo apice montis Pangerango; ad arborum cortices, ptl. m et f; lgt. Dr. G. Karsten, 20. Febr. 1890.

Metzgeria crassicostata Steph., Hedwigia 28: 269 (1889) = **Metzgeria rigida** Lindb.

Original material: Richmond River, de Camara 1882.

Metzgeria crassipilis (Lindb.) A.Evans, Rhodora 11: 188 (1909)

Basionym: *Metzgeria furcata* subsp. *crassipilis* Lindb.

Metzgeria decipiens (C.Massal.) Schiffn., Die Forschungsreise S.M.S. Gazelle 4(4): 43 (1889[1890]) = **Metzgeria furcata** (L.) Dumort.

Basionym: *Metzgeria furcata* var. *decipiens* C.Massal.

Metzgeria densiseta Steph., Species Hepaticarum 6: 49 (1917)

Original material: Hab. Nova Caledonia (Lerat legit).

Metzgeria flavovirens Colenso, Transactions and Proceedings of the New Zealand Institute 21: 79 (1889)

Original material: Hab. On trunks of living trees, near their bases, forming dense large spreading patches ; dry woods near Daunevirke, County of Waipawa ; 1888 : W. C.

Metzgeria franciana Steph., Species Hepaticarum 6: 54 (1917)

Original material: Hab. Nova Caledonia (Lerat legit).

Metzgeria furcata (L.) Dumort., Recueil d'Observations sur les Jungermanniacees: 26 (1835)

Basionym: *Jungermannia furcata* L.

Metzgeria furcata subsp. *crassipilis* Lindb., Acta Societatis pro Fauna et Flora Fennica 1: 42 (1878) ≡ **Metzgeria crassipilis** (Lindb.) A.Evans

Metzgeria furcata var. *decipiens* C.Massal., Nuovo Giornale Botanico Italiano 17: 256 (1885) = **Metzgeria furcata** (L.) Dumort.

Metzgeria glaberrima Steph., Bulletin de l'Herbier Boissier 7: 939 (1899) = **Metzgeria furcata** (L.) Dumort.

Original material: Hab. Fretum magellanicnm (Spegazzini, Dusén, Exped. Gazelle). Chile (Gay, Krause). New Zealand (Knight, Cheeseman, Beckett). Australia, (Victoria (Lauterbach).

Metzgeria grollei Kuwah., The Bryologist 71: 104 (1968) = **Metzgeria furcata** (L.) Dumort.

Metzgeria hamata Lindb., Acta Societatis pro Fauna et Flora Fennica 1: 25 (1878) = **Metzgeria leptoneura** Spruce

Metzgeria hebridensis Steph., Species Hepaticarum 6: 51 (1917)

Original material: Hab. Insulae Novae Hebridae (Joly et Gunn legit).

Metzgeria howeana Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 126 (1914)

Original material: Hab. Australia, Mt Wilson and Wyong: Watts legit 1065.

Metzgeria leptoneura Spruce, Transactions and Proceedings of the Botanical Society Edinburgh 15: 555 (1885)

Original material: Hab. In M. Campana Andium Peruvian ad saxa.

Metzgeria lindbergii Schiffn., Denkschriften der Kaiserlichen Akademie der Wissenschaften, Mathematisch-Naturwissenschaftliche Klasse 67: 182 (1898)

Metzgeria nitida Mitt., Journal of the Linnean Society, Botany 22: 243 (1886)

Original material: Hab. Australia, Apollo Bay, Sir F. von Mueller; New Zealand, Rev. W. Colenso, on a specimen of Homalia pulchella, a 279.

Metzgeria pectinata Steph., Species Hepaticarum 6: 58 (1917) = **Metzgeria lindbergii** Schiffn.

Original material: Hab. Hawai (Baldwin legit) [sic].

Metzgeria pinnata Steph., Species Hepaticarum 6: 59 (1917) = **Metzgeria furcata** (L.) Dumort.

Original material: Hab. Australia Aucklands Islands. (Tennant legit).

The status of this name, and relationships to *M. furcata*, require further investigation in lieu of results obtained by Bechteler et al. (2021).

Metzgeria rigida Lindb., Acta Societatis pro Fauna et Flora Fennica 1: 43 (1878)

Metzgeria saccata Mitt., Journal of the Linnean Society, Botany 22: 241 (1886)

Original material: Hab. New Zealand, on bark, with a Frullania and several mosses, a very few stems only ; Tasmania, forests between the Gordon and Franklin rivers ; McQuarie Harbour, 1846, Dr. Milligan, a fragment.

Metzgeria submarginata M.L.So, New Zealand Journal of Botany 40: 201 (2002)

Original material: Australia: Tasmania: Lake Dobson-Mt Field Track, 25 km WNW of Bushy Park, wet sclerophyll forest on moderate slope, on *Nothofagus* twigs, 1280 m, 7 Dec 1998, *H. Streimann 39987* (holo: CBG 8805565).

Metzgeria wattsiana Steph., Species Hepaticarum 6: 61 (1917) = **Metzgeria rigida** Lindb.

Original material: Hab. Australia, New South Wales. (Watts legit).

Microlejeunea (Spruce) Steph., Hedwigia 29: 89 (1890)

Basionym: *Lejeunea* subg. *Microlejeunea* Spruce

Microlejeunea bischlerae (B.M.Thiers) B.M.Thiers, Phytotaxa 65: 59 (2012)

Basionym: *Lejeunea bischlerae* B.M.Thiers

Microlejeunea catanduana Steph., Hedwigia 35: 113 (1896) ≡ **Lejeunea anisophylla** Mont.

Original material: Hab. Insula philippin. Catanduana (Micholitz), Nova Guinea (Karnbach).

Microlejeunea filicuspis (Steph.) Heinrichs, Schäf.-Verw., Pócs & S.Dong, Phytotaxa 85: 52 (2013)

Basionym: *Drepanolejeunea filicuspis* Steph.

Microlejeunea gracillima (Mitt.) Steph., Species Hepaticarum 5: 830 (1915) = **Microlejeunea ulicina** (Taylor) Steph.

Basionym: *Lejeunea gracillima* Mitt.

Microlejeunea latitans (Hook.f. & Taylor) Heinrichs, Schäf.-Verw., Pócs & S.Dong, Phytotaxa 85: 52 (2013)

Basionym: *Jungermannia latitans* Hook.f. & Taylor

Microlejeunea ocellata (Herzog) Grolle, Hausknechtia 8: 60 (2001) ≡ **Cumulolejeunea ocellata** (Herzog) R.L.Zhu & L.Shu

Basionym: *Rectolejeunea ocellata* Herzog

Microlejeunea primordialis (Hook.f. & Taylor) Steph., Species Hepaticarum 5: 837 (1915) ≡ **Lejeunea primordialis** (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

Basionym: *Jungermannia primordialis* Hook.f. & Taylor

Microlejeunea punctiformis (Taylor) Steph., Hedwigia 29(2): 90 (1890)

Basionym: *Lejeunea punctiformis* Taylor

Microlejeunea spinosa (Mizut.) Grolle, Journal of Bryology 21: 43 (1999)

Basionym: *Harpalejeunea spinosa* Mizut.

Microlejeunea ulicina (Taylor) Steph., Hedwigia 29(2): 88 (1890)

Basionym: *Jungermannia ulicina* Taylor

Microlejeunea victoriensis D.J.Carr, Proceedings of the Royal Society of Victoria 117: 322 (2005) = **Siphonolejeunea nudipes** (Hook.f. & Taylor) Herzog

Original material: Victoria: on the bark of trees (*Banksia serrata*) at Wilsons Promontory, Nov. 1954, *D.J.Carr & S.G.M.Carr* (holo: MEL).

Microlejeunea wallichiana (Lehm.) R.L.Zhu & Y.M.Wei, Cryptogamie Bryologie 34: 308 (2013)

Basionym: *Jungermannia wallichiana* Lehm.

Microlejeunea wattsiana Steph., Species Hepaticarum 5: 834 (1915) ≡ **Lejeunea wattsiana** (Steph.) H.A.Mill., Bonner & Bischl.

Original material: Hab. Australia orientalis, New South Wales.

Mnioloma Herzog, Annales Bryologici 3: 119 (1930)

Mnioloma fuscum (Lehm.) R.M.Schust., Fragmenta Floristica et Geobotanica. Materialy Floristiczne i Geobotaniczne 40: 848 (1995)

Basionym: *Jungermannia fusca* Lehm.

Mnioloma stamatotonum M.A.M.Renner & E.A.Br., Fieldiana, Botany, n.s 47: 173-174, Fig. 11 (2008)

Original material: Queensland: Mt. Lewis, *M.A.M. Renner 2139* (holo: NSW 760047; iso: F, P).

Monocarpus D.J.Carr, Australian Journal of Botany 4(2): 176 (1956)

Monocarpus sphaerocarpus D.J.Carr, Australian Journal of Botany 4(2): 176 (1956)

Original material: Victoria: By the side of the Calder Highway at Yatpool, adjacent to Red Cliffs, on the bare mud of a saltpan, 1955, *D.J. Carr & S.G.M. Carr s.n.* (holo: MEL 1039103A).

Monoclea Hook., Musci Exotici 2: App. 27, pl. 174 (1820)

Monoclea crispata Hook., Botanical Miscellany 1: 117–118, t. xxvii (1830) ≡ **Dendroceros crispatus** (Hook.) Nees

Monoclea forsteri Hook., Musci Exotici. Musci Exotici 2: 174 (1820)

Monoclea forsteri has been reported for Australia based on misidentifications of *Aneura gigantea*.

Myriocoleopsis Schiffn., Hedwigia 81: 234 (1844)

Myriocoleopsis minutissima (Sm.) R.L.Zhu, Y.Yu & Pócs, Phytotaxa 183(4): 293 (2014)

Basionym: *Jungermannia minutissima* Sm.

Nardia humilis (Hook.f. & Taylor) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 412 (1877) ≡ **Clasmatocolea humilis** (Hook.f. & Taylor) Grolle

Basionym: *Jungermannia humilis* Hook.f. & Taylor

Nardia montana Steph., Hedwigia 28: 164 (1889) ≡ **Solenostoma montanum** (Steph.) Váňa

Original material: Bellender Ker Range leg Karsten.

Nardia obliquifolia Schiffn., Denkschriften der Kaiserlichen Akademie der Wissenschaften, Mathematisch-Naturwissenschaftliche Klasse 67: 191 (1899) ≡ **Solenostoma obliquifolium** (Schiffn.) R.M.Schust. ex Váňa, Hentschel & Heinrichs

Original material: Sumatra occid.: In monte Singalang; in silvis primaevis ad decliv. Orient, ad ripas torrentis ad terram. Regio nubium, alt. ±2000 m s. m. — 24. 7. 1894. (No. 481.)

Neesioscyphus phoenicorhizus Grolle, Oesterreichische Botanische Zeitschrift 111: 27 (1964) ≡ **Acroscyphella phoenicorhiza** (Grolle) N.Kitag. & Grolle

Neogrollea E.A.Hodgs., Transactions of the Royal Society of New Zealand. Botany 3(4): 70 (1965)

Neogrollea notabilis E.A.Hodgs., Transactions of the Royal Society of New Zealand. Botany 3(4): 70 (1965)

Neolepidozia Fulford & J.Taylor, Brittonia 11: 81 (1959)

Neolepidozia capilligera (Schwägr.) Fulford & J.Taylor, Brittonia 11: 84 (1959)

Basionym: *Jungermannia capilligera* Schwägr.

Neolepidozia consobrina (J.J.Engel & G.L.Merr.) E.D.Cooper, Phytotaxa 97(2): 55 (2013)

Basionym: *Telaranea consobrina* J.J.Engel & G.L.Merr.

Neolepidozia disparata (J.J.Engel & G.L.Merr.) E.D.Cooper, Phytotaxa 97(2): 55 (2013)

Basionym: *Telaranea disparata* J.J.Engel & G.L.Merr.

Neolepidozia gottscheana (Lindenb.) Hodgs., Records of the Dominion Museum 4: 106 (1962) = **Neolepidozia patentissima** (Hook.f. & Taylor) E.D.Cooper

Basionym: *Lepidozia gottscheana* Lindenb.

Neolepidozia palmata (J.J.Engel & G.L.Merr.) E.D.Cooper, Phytotaxa 97(2): 56 (2013)

Basionym: *Telaranea palmata* J.J.Engel & G.L.Merr.

Neolepidozia patentissima (Hook.f. & Taylor) E.D.Cooper, Phytotaxa 97(2): 56 (2013)

Basionym: *Jungermannia patentissima* Hook.f. & Taylor

Neolepidozia patentissima var. **ampliata** (J.J.Engel & G.L.Merr.) E.D.Cooper, Phytotaxa 97(2): 56 (2013)

Basionym: *Telaranea patentissima* var. *ampliata* J.J.Engel & G.L.Merr.

Neolepidozia patentissima var. **zebrina** (J.J.Engel & G.L.Merr.) E.D.Cooper, Phytotaxa 97(2): 57 (2013)

Basionym: *Telaranea patentissima* var. *zebrina* J.J.Engel & G.L.Merr.

Neolepidozia praenitens (Lehm. & Lindenb.) E.D.Cooper, Phytotaxa 97(2): 57 (2013)

Basionym: *Jungermannia praenitens* Lehm. & Lindenb.

Neolepidozia praenitens is endemic to New Zealand according to Engel and Glenny (2008).

Neolepidozia quadristipula (Steph.) E.D.Cooper, Phytotaxa 97(2): 57 (2013)

Basionym: *Lepidozia quadristipula* Steph.

Neolepidozia tetradactyla (Hook.f. & Taylor) Fulford & J.Taylor, Brittonia 11: 84 (1959)

Basionym: *Jungermannia tetradactyla* Hook.f. & Taylor

Neolepidozia tetradactyla was regarded as a New Zealand endemic by Engel & Glenny (2008). Australian records should be critically compared with confirmed voucher material.

Neolepidozia tridactylis (Lehm. & Lindenb.) E.D.Cooper, Phytotaxa 97(2): 58 (2013)

Basionym: *Jungermannia tridactylis* Lehm. & Lindenb.

Neolepidozia verruculosa (J.J.Engel & Merrill) E.D.Cooper, Phytotaxa 97(2): 58 (2013)

Basionym: *Telaranea verruculosa* J.J.Engel & Merrill

Nephelolejeunea Grolle, Journal of the Hattori Botanical Laboratory 37: 252 (1973) = **Siphonolejeunea** Herzog

Nephelolejeunea bidentata (B.M.Thiers) L.Söderstr. & A.Hagborg, Phytotaxa 202: 65 (2015) ≡ **Siphonolejeunea bidentata** (B.M.Thiers) M.A.M.Renner

Basionym: *Austrolejeunea bidentata* B.M.Thiers

Nephelolejeunea hamata Grolle, Journal of the Hattori Botanical Laboratory 48: 167 (1980) ≡ **Siphonolejeunea hamata** (Grolle) M.A.M.Renner

Nephelolejeunea jarmaniana (Grolle) L.Söderstr. & A.Hagborg, Phytotaxa 202: 66 (2015) ≡ **Siphonolejeunea jarmaniana** (Grolle) M.A.M.Renner

Basionym: *Austrolejeunea jarmaniana* Grolle

Noteroclada lacunosa Colenso, Transactions and Proceedings of the New Zealand Institute 18: 248 (1885) ≡ **Treubia lacunosa** (Colenso) Prosk.

Original material: Hab. Scattered in small patches on wet shaded banks, sides of streams and watercourses, among other Hepaticae ; low woods, Seventy-mile Bush, County of Waipawa, 1880-85 : W.C.

Noteroclada perpusilla Colenso, Transactions and Proceedings of the New Zealand Institute 17: 260 (1885) = **Fossombronia perpusilla** (Colenso) Steph.

Original material: Hab. Among mosses, etc., shady banks, Seinde Island, Napier; August, 1883: W.C.

Nothogymnomitrion R.M.Schust., Journal of the Hattori Botanical Laboratory 80: 43 (1996)

Nothogymnomitrion erosum (Carrington & Pearson) R.M.Schust., Journal of the Hattori Botanical Laboratory 80: 43 (1996)

Basionym: *Cesia erosa* Carrington & Pearson

Notoscyphus Mitt., Flora Vitiensis: 407 (1873)

Notoscyphus lutescens (Lehm. & Lindenb.) Mitt., Flora Vitiensis: 407 (1873)

Basionym: *Jungermannia lutescens* Lehm. & Lindenb.

Notothylas Sull. ex A.Gray, American Journal of Science and arts ser. 2 1: 74 (1846)

Notothylas javanica (Sande Lac.) Gottsche, Botanische Zeitung 16: 20 (1858)

Basionym: *Blasia javanica* Sande Lac.

Notothylas orbicularis (Schwein.) Sull., American Journal of Science and Arts ser. 2, 1: 75 (1846)

Basionym: *Targionia orbicularis* Schwein.

Nowellia Mitt. Natural History of the Azores, or Western Islands 321 (1870)

Nowellia curvifolia (Dicks.) Mitt., Natural History of the Azores, or Western Islands 321 (1870)

Basionym: *Jungermannia curvifolia* Dicks.

Nowellia langii Pears., Journal of the Linnean Society, Botany 46: 25 (1922)

Original material: Hab. On rotting wood, Maxwells Hill, Perak, Malaya (Prof. W. H. Lang). Ignambi. On rocks by creek, 2000 ft. 1530.

Odontoschisma marginatum (Steph.) Steph., Species Hepaticarum 3: 378 (1908) ≡ **Clasmatocolea marginata** (Steph.) Grolle

Basionym: *Leioscyphus marginatus* Steph.

Omphalanthus Lindenb. & Nees, Synopsis Hepaticarum 2: 303 (1845)

Omphalanthus gracilipes Taylor, London Journal of Botany 5: 385 (1846) ≡ **Lejeunea gracilipes** (Taylor) Spruce

Original material: Hab. Pacific Isle, Nightingale, Hook. Herb.

Otolejeunea Grolle & Tixier, Nova Hedwigia 32: 609 (1980)

Otolejeunea australiensis B.M.Thiers, Brittonia 44(2): 162 (1992) ≡ **Allorgella australiensis** (B.M.Thiers) Bechteler, G.E.Lee, Schäf.-Verw. & Heinrichs

Otolejeunea semperiana (Gottsche ex Steph.) Grolle, Haussknechtia; Mitteilungen der Thuringischen Botanischen Gesellschaft 2: 53 (1985) ≡ **Allorgella semperiana** (Gottsche ex Steph.) Bechteler, G.E.Lee, Schäf.-Verw. & Heinrichs

Basionym: *Prionolejeunea semperiana* Gottsche ex Steph.

Pachyschistochila R.M.Schust. & J.J.Engel, Phytologia 50(3): 177 (1982)

Pachyschistochila altissima (E.A.Hodgs.) R.M.Schust. & J.J.Engel, Phytologia 50: 179 (1982)

Basionym: *Schistochila altissima* E.A.Hodgs.

Pachyschistochila parvistipula (Rodway) R.M.Schust. & J.J.Engel, Phytologia 50: 179 (1982)

Basionym: *Schistochila parvistipula* Rodway

Pachyschistochila succulenta J.J.Engel & R.M.Schust., Journal of the Hattori Botanical Laboratory 58: 517 (1985)

Original material: Tasmania: Mt. Field Natl. Park, Rodway Range, between Rodway Ski Tow and K Col area, 1240–1310 m, *Engel 14410* (holo: F; iso: HO).

Pachyschistochila trispiralis (R.M.Schust.) R.M.Schust. & J.J.Engel, Phytologia 50: 179 (1982)

Basionym: *Schistochila trispiralis* R.M.Schust.

Pallavicinia Gray, A Natural Arrangement of British Plants 1: 775 (1821), *nom. cons.*

Pallavicinia campanulata Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 127 (1914) = **Podomitrium phyllanthus** (Hook.) Mitt.

Pallavicinia lyellii (Hook.) Gray, A Natural Arrangement of British Plants 1: 775 (1821)

Basionym: *Jungermannia lyellii* Hook.

#Pallavicinia pseudolyellii R.M.Schust. & J.J.Engel, Nova Hedwigia Beih. 150: 265, f. 1-2 (2020)

Original material: New Zealand: North Is., Taranaki Prov., Pukeiti Bush, near Plymouth, *Hatcher 407A* (holo: F).

Pallavicinia pseudolyellii has been reported for New South Wales and Tasmania but was regarded as a New Zealand endemic by Engel (2020) who we follow here.

Pallavicinia purpurea Steph., Species Hepaticarum 6: 64 (1917)

Original material: Hab. Australia. Blue Mountains. (Herbar Sydney : Watts legit.)

Pallavicinia rubristipa Schiffn., Oesterreichische Botanische Zeitschrift 56: 24 (1906)

Pallavicinia xiphoides (Hook.f. & Taylor) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 427 (1877)

Basionym: *Jungermannia xiphoides* Hook.f. & Taylor

Paracromastigum Fulford & J.Taylor, Brittonia 13: 336 (1961)

Paracromastigum longiscyphum (Taylor) R.M.Schust. & J.J.Engel, Brittonia 48: 170 (1996)

Basionym: *Jungermannia longiscypha* Taylor

Paracromastigum vastilobum (Steph.) J.J.Engel & G.L.Merr., Fieldiana, Botany, n.s 44: 255 (2004)

Basionym: *Lepidozia vastiloba* Steph.

Paraschistochila R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 259 (1963) = **Gottschea** Nees ex Mont.

The recognition of *Gottschea* as distinct from *Schistochila* results in a paraphyletic *Schistochila*, but also a paraphyletic *Gottschea*. Unfortunately, a fully informed resolution of generic limits within the Schistochilaceae has not yet been achieved. While we recognise that genera within the Schistochilaceae are non-monophyletic, we follow the schema of Engel & Glenny (2019) for consistency of name application across the Tasman, while anticipating further revision of generic circumscription once morphological and molecular data have been integrated across a full sampling of the phylogenetic and morphological diversity expressed by the Schistochilaceae, including additional representatives from Malesia and in particular Papua New Guinea, alongside those sampled to date.

Paraschistochila aligera (Nees & Blume) R.M.Schust., Bulletin of the National Science Museum, Tokyo 14: 647 (1971) ≡ **Gottschea aligera** (Nees & Blume) Nees

Basionym: *Jungermannia aligera* Nees & Blume

Paraschistochila isotachyphylla J.J.Engel & R.M.Schust., Journal of the Hattori Botanical Laboratory 58: 429 (1985) ≡ **Gottschea isotachyphylla** (J.J.Engel & R.M.Schust.) J.J.Engel

Original material: Tasmania: plateau region E and SE of Mt. Eliza summit, E of Lake Pedder, ca. 1225 m, *Engel 13688* (holo: F; iso: HO).

Paraschistochila lacerata (Steph.) R.M.Schust., Bulletin of the National Science Museum, Tokyo 14: 647 (1971) ≡ **Gottschea lacerata** (Steph.) Grolle & Zijlistra

Basionym: *Schistochila lacerata* Steph.

Paraschistochila philippinensis (Mont.) R.M.Schust., Bulletin of the National Science Museum, Tokyo 14: 647 (1971) ≡ **Gottschea philippinensis** Mont.

Basionym: *Gottschea philippinensis* Mont.

Paraschistochila tuloides (Hook.f. & Taylor) R.M.Schust., Bulletin of the National Science Museum, Tokyo 14: 647 (1971) ≡ **Gottschea tuloides** (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

Basionym: *Jungermannia tuloides* Hook.f. & Taylor

Pedinophyllum Lindb., Hep. Hibern. 504 (1875)

#Pedinophyllum monoicum (Steph.) Grolle, Nova Hedwigia 2: 287 (1960)

Basionym: *Plagiochila monoica* Steph.

Engel & Glenny (2019a) give the distribution of *Pedinophyllum monoicum* as including Victoria, based on McCarthy (2003), who cited the reports of Meagher (2000) and McLean & Meagher (2001). Critical examination of Australian material was not undertaken by Engel & Glenny (2019a), who also overlooked the study by Renner et al. (2016) in which *P. monoicum* was excluded from Australia following examination of all Australian specimens then determined as *P. monoicum* and which comprised the basis of the Australian reports of this species. All Australian specimens of '*P. monoicum*' were misidentified specimens of *Syzygiella tasmanica*. *Pedinophyllum monoicum* is endemic to New Zealand and does not occur in Australia.

Petalophyllum Nees & Gottsche ex Lehm., Novarum et Minus Cognitarum Stirpium Pugillus 8: 829 (1844)

Petalophyllum preissii Lehm., Novarum et Minus Cognitarum Stirpium Pugillus 8: 30 (1844)

Original material: Crescit caespitosa in locis arenosis humidis, una cum Riccia, Bryis et Weissiis ad flumen Cygnorum in Nova Hollandia. (Herb. Preiss. no. 2472.)

Phaeoceros Prosk., Bulletin of the Torrey Botanical Club 78: 346 (1951)

Phaeoceros carolinianus (Michx.) Prosk., Bulletin of the Torrey Botanical Club 78: 347 (1951)

Basionym: *Anthoceros carolinianus* Michx.

Phaeoceros engelii Cargill & Fuhrer, Fieldiana, Botany, n.s. 47: 248 (2008)

Original material: Victoria: Lower Glenelg National Park, Kentbruck Rd, bridge over Moleside Crk, 11 Oct. 2006, *D.C. Cargill & B.A. Fuhrer 1016* (holo: CANB 786737).

Phaeoceros evanidus (Steph.) Cargill & Fuhrer, Fieldiana, Botany, n.s. 47: 245 (2008)

Basionym: *Anthoceros evanidus* Steph.

Phaeoceros inflatus (Steph.) Cargill & Fuhrer, Fieldiana, Botany, n.s. 47: 246 (2008)

Basionym: *Anthoceros inflatus* Steph.

Phaeoceros laevis subsp. *carolinianus* (Michx.) Prosk., Rapports et Communications Parvenus Avant le Congres aux Sections 7 et 8. VIII International Botanical Congress 14-16: 69 (1954) ≡ **Phaeoceros carolinianus** (Michx.) Prosk.

Basionym: *Anthoceros carolinianus* Michx.

Phaeoceros tuberosus (Taylor) Prosk., Journal of the Indian Botanical Society 42A: 185 (1964)

Basionym: *Anthoceros tuberosus* Taylor

Phragmicoma aulacophora Mont., Annales des Sciences Naturelles; Botanique 19: 259 (1843) ≡ **Acrolejeunea aulacophora** (Mont.) Steph.

Original material: Hab. cum Frullaniâ aeloti N. et M. et Calympere molluccensi promiscuc ad radices arborum crescit. In insulâ Manga-Revah cl. Hombron lecta.

Phragmicoma cumingiana Mont., Plantae Cellulares. London Journal of Botany 4: 7 (1845) ≡ **Schiffneriolejeunea cumingiana** (Mont.) Gradst.

Original material: Hab. Ad cortices. Excicc. 2189

Phragmicoma eavesiana Gottsche & F.Muell., Fragmenta Phytographiae Australiae 11(Suppl.): 63 (1880) = **Spruceanthus thozetianus** (Gottsche & F.Muell.) B.M.Thiers & Gradst.

Original material: In eastern subtropical Australia, Eaves.

Phragmicoma eulopha (Taylor) Mitt., Flora Vitiensis: 413 (1873) ≡ **Lopholejeunea eulopha** (Taylor) Schiffn.

Basionym: *Lejeunea eulopha* Taylor

Phragmicoma hasskarliana Gottsche, Synopsis Hepaticarum 2: 299 (1845) ≡ **Schiffneriolejeunea tumida** var. **hasskarliana** (Gottsche) Gradst. & Terken

Original material: Habitat in Java insula (Haskarl in Hb. N).

Named for Justus Carl Hasskarl, whose surname Gottsche consistently misspelt as 'Haskarl', the specific epithet is therefore correctible under Art. 60.1 without conservation.

Phragmicoma humilis Gottsche, Synopsis Hepaticarum 3: 299 (1845) ≡ **Thysananthus humilis** (Gottsche) Sukkharak & Gradst.

Original material: Habitat in Java insula (Junghuhn in Hb. N.).

Phragmicoma keppelina Gottsche & F.Muell., Fragmenta Phytographiae Australiae 11(Suppl.): 63 (1880), *nom. inval.* = **Spruceanthus thozetianus** (Gottsche & F.Muell.) B.M.Thiers & Gradst.

Phragmicoma plicatiscypha Hook.f. & Taylor, London Journal of Botany 5: 386 (1846) ≡ **Lopholejeunea plicatiscypha** (Hook.f. & Taylor) Steph.

Original material: Hab. Bay of Islands, New Zealand. Dr. Sinclair, Hook. Herb.

Phragmicoma polymorpha Sande Lac., Nederlandsch Kruidkundig Archief 3: 420 (1853) ≡ **Spruceanthus polymorphus** (Sande Lac.) Verdoorn

Original material: none cited.

Phragmicoma polymorpha was published in a paper describing new Javan liverworts collected by Junghuhn.

Phragmicoma pulopenangensis Gottsche, Synopsis Hepaticarum 2: 299 (1845) ≡ **Schiffneriolejeunea pulopenangensis** (Gottsche) Gradst.

Original material: Habitat in Pulo-Penang (Montagne l.c.).

Phragmicoma reniloba Gottsche, Synopsis Hepaticarum 2: 301 (1845) ≡ **Caudalejeunea reniloba** (Gottsche) Steph.

Original material: Habitat in Java insula (Hb. N. ubi inter Thysananthum spathulistipum invenit Gottsche).

Phragmicoma thozetiana Gottsche & F.Muell., Fragmenta Phytographiae Australiae 11(Suppl.): 63 (1880) ≡ **Spruceanthus thozetianus** (Gottsche & F.Muell.) B.M.Thiers & Gradst.

Original material: Near Keppel's Bay (m. et f.) Thozet.

Physiotium articulatum Lindb., Oefversigt af Forhandlingar; Finska Vetenskaps-Societeten 12(2): 78 (1869) ≡ **Pleurozia articulata** (Lindb.) Schiffn.

Physiotium muelleri Gottsche ex J.B.Jack, Hedwigia 25: 74 (1886) = **Pleurozia articulata** (Lindb.) Schiffn.

Physiotium muelleri Gottsche ex J.B.Jack, Hedwigia 25: 74 (1886) = **Pleurozia articulata** (Lindb.) Schiffn.

Original material: Hab. Australia orientali-borealis tropica, Queens-Land, ubi juxta sinum Rockinghambay [sic] legit Liber Baro Ferdinan de Mueller (Direct. Horti botanic. Melbourn) [sic].

Physocolea casuarinae Steph., Species Hepaticarum 5: 909 (1916) = **Cololejeunea minutissima** (Sm.) Schiffn.

Original material: Hab. Australia orientalis. New South Wales.

Stephani describes a plant too large to be a synonym of *Cololejeunea minutissima*, the status of this taxon requires investigation, with critical examination of original material a necessary first step to improving our knowledge.

Physocolea falcata Horik., Journal of Science of the Hiroshima University: Series B, Division 2 (Botany) 1: 22 (1931) ≡ **Cololejeunea falcata** (Horik.) Benedix

Physocolea gottschei Steph., Species of Hepatics hitherto Found in the British Isles 5: 894 (1916) ≡ **Cololejeunea gottschei** (Steph.) Pande, K.P.Srivast. & Ahmad

Physocolea laevigata Steph., Species Hepaticarum 5: 910. 1916. ≡ **Cololejeunea laevigata** (Steph.) R.M.Schust.

Original material: Hab. Nova Zelandia.

Physocolea oshimensis Horik., Journal of Science of the Hiroshima University: Series B, Division 2 (Botany) 1: 69 (1931) = **Cololejeunea inflata** Steph.

Physocolea papillosa K.I.Goebel, Annales de Jardin Botanique de Buitenzorg 39: 41 (1928) ≡ **Cololejeunea papillosa** (K.I.Goebel) Mizut.

Physocolea peculiaris Herzog, Mitteilungen aus dem Institut fur allgemeine Botanik in Hamburg 7: 216 (1931)

Plagiochasma Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 4: 13 (1832), *nom. cons.*

Plagiochasma australe Nees, Synopsis Hepaticarum 4: 515 (1846) = **Plagiochasma rupestre** (J.R.Forst. & G.Forst.) Steph.

Original material: Habitat in Nova Zeelandia (Hooker jun.).

Type: New Zealand. leg. Hooker s.n. 1843. (FH, G, MANCH, NY, S-PA, W)

Plagiochasma extensum (Steph.) Steph., Bulletin de l'Herbier Boissier 6: 788 = **Plagiochasma rupestre** (J.R.Forst. & G.Forst.) Steph.

Basionym: *Aytonia extensa* Steph.

Type: Australia occidental. Elder Exploring Expedition Camp 10. leg. R.Helms. 8/6/1891 (lectotype G).

Plagiochasma queenslandicum Steph., Species Hepaticarum 6: 9 (1917) ≡ **Reboulia queenslandica** (Steph.) M.L.Hicks

Original material: Hab. Australia. Queensland. (Simmons legit).

Plagiochasma rupestre (J.R.Forst. & G.Forst.) Steph., Bulletin de l'Herbier Boissier 6(10): 783 (1898)

Basionym: *Aytonia rupestris* J.R.Forst. & G.Forst.

Plagiochila (Dumort.) Dumort., Recueil d'Observations sur les Jungermanniacees: 14 (1835), *nom. cons.*

Basionym: *Radula* sect. *Plagiochila* Dumort.

Plagiochila abietina (Nees) Nees & Mont., Voyage dans l'Amerique Meridionale 7(2): 81 (1839)

Basionym: *Jungermannia abietina* Nees

Plagiochila acutifolia Steph., Species Hepaticarum 6: 119 (1917)

Original material: Australia. Norfolk Island (Robinson legit).

Plagiochila aemula M.A.M.Renner, Telopea 21: 281 (2018)

Original material: Queensland: Upper West Mulgrave River, below Bobbin Bobbin Falls, 17°22′S, 145°46′E, 600 m, 3 Sep. 2014, *M.A.M. Renner 7334 & L.J. Gray* (holo: NSW 880509).

Plagiochila aenea M.A.M.Renner, Telopea 21: 319 (2018)

Original material: Queensland: Cook, Daintree National Park, track to Manjal Jimalji, between coral fern patch and split rock, 16°23′29″S, 145°17′29″E, 1025 m, *M.A.M. Renner 6975 & T.C. Wilson* (holo: NSW 858925; iso: BRI, CANB, MEL, SUVA).

Plagiochila annotina Menzies ex Lindenb., Species Hepaticarum 1: 34 (1839)

Plagiochila annotina is endemic to New Zealand (Renner 2018).

Plagiochila apatila M.A.M.Renner, Telopea 21: 333 (2018)

Original material: Queensland: North Kennedy, Tully Falls National Park, Tully Falls Road, Charmill Creek, 17°42′03″S 145°31′26″E, 1000 m, 31 May 2014, *M.A.M. Renner 7090 & T.C. Wilson* (holo: NSW 858920; iso: BRI, CANB, G).

Plagiochila apiculata Steph. ex Weymouth, Papers and Proceedings of the Royal Society of Tasmania 1902: 131 (1903), *nom. inval.* = **Plagiochila retrospectans** Nees

Plagiochila apiculata Steph. ex Dugas, Contribution a l'Etude du Genre Plagiochila: 92 (1928), *nom. inval.* = **Plagiochila retrospectans** Nees

Plagiochila arbuscula (Brid. ex Lehm. & Lindenb.) Lindenb., Species Hepaticarum 1: 23 (1839)

Basionym: *Jungermannia arbuscula* Brid. ex Lehm. & Lindenb.

Plagiochila australis Steph., Species Hepaticarum 6: 126 (1917) = **Plagiochila arbuscula** (Brid. ex Lehm. & Lindenb.) Lindenb.

Original material: Australia. Sydney (Remy legit.).

Plagiochila baileyana Steph. ex F.M.Bailey, A Synopsis of the Queensland Flora Suppl. 3: 102 (1890), *nom. inval.* ≡ **Plagiochila baileyana** Steph.

Plagiochila baileyana Steph., Species Hepaticarum 2: 311 (1906)

Original material: Australia, Queensland, Bellenden Ker Range (Bailey).

Plagiochila banksiana Gottsche, Annales des Sciences Naturelles; Botanique 8: 329 (1857)

Plagiochila bantamensis (Reinw., Blume & Nees) Mont., Voyage dans l'Amerique Meridionale 7(2): 82 (1839)

Basionym: *Jungermannia bantamensis* Reinw., Blume & Nees

Plagiochila baylisii Inoue & R.M.Schust. Journal of the Hattori Botanical Laboratory 34: 150 (1971)

Original material: New Zealand: South Island: Fiordland Natl. Park, SE corner of Secretary I., Doubtful Sd., in dense, undisturbed forest on steep, peaty slopes, 10–250 ft, *RMS 57492a*.

Plagiochila bellendeniensis Steph., Species Hepaticarum 2: 285 (1903) = **Plagiochila daviesiana** Steph.

Original material: Queensland (Bailey)

Plagiochila biserialis Lehm. & Lindenb., Synopsis Hepaticarum 5: 126 (1843) ≡ **Chiastocaulon biseriale** (Lehm. & Lindenb.) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs

Original material: Australia, Novae Hollandia, herb. Hooker.

Plagiochila blepharophora (Nees) Lindenb., Species Hepaticarum 2-4: 102 (1840)

Basionym: *Jungermannia blepharophora* Nees

Plagiochila brotheri Steph., Species Hepaticarum 2: 453 (1906) = **Plagiochila vitiensis** Mitt.

Original material: Queensland (Bailey).

Plagiochila camarae Steph. ex Dugas, Contribution a l'Etude du Genre Plagiochila: 130, 184 (1928) = **Plagiochila paucidens** Steph.

Plagiochila carnosa Herzog, Transactions of the British Bryological Society 1: 181 (1949) = **Syzygiella tasmanica** (Hook.f. & Taylor) K.Feldberg, Váňa, Hentschel & Heinrichs

#Plagiochila chauviniana Mont., Annales des Sciences Naturelles; Botanique ser. 3, 11: 34 (1849)

Original material: Patria ignota.

Plagiochila chauviana does not occur in Australia (Renner 2018).

Plagiochila chiloscyphoidea Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 8: 4 (1844) = **Leptoscyphus expansus** (Lehm.) Grolle

Original material: Habitat in Terra Magellanica. (d'Urville in Herb. Mont.).

Plagiochila circinalis (Lehm. & Lindenb.) Lehm. & Lindenb. ex Lindenb., Synopsis Hepaticarum 5: 124 (1843)

Basionym: *Jungermannia circinalis* Lehm. & Lindenb.

#Plagiochila circumdentata Steph., Species Hepaticarum 2: 456 (1904)

Original material: New Zealand (Beckett).

Plagiochila circumdentata is endemic to New Zealand (Renner 2018).

#Plagiochila colensoi Hook.f. & Taylor, London Journal of Botany 5: 269 (1846)

Original material: New Zealand. n.159. Colenso, Hook. Herb.

Plagiochila colensoi is endemic to New Zealand (Renner 2018).

Plagiochila conturbata Steph., Species Hepaticarum 2: 456 (1904)

Original material: Queensland (Bailey).

Plagiochila daviesiana Steph., Bulletin de l'Herbier Boissier ser. 2, 3: 105 (1903)

Original material: Pacific Isles (?) Georges Davies.

Plagiochila decurvifolia Steph., Species Hepaticarum 2: 457 (1904) = **Plagiochila circinalis** (Lehm. & Lindenb.) Lehm. & Lindenb. ex Lindenb.

Original material: Tasmania (Oldfield); New Zealand (Kirk, Beckett, Dall).

Plagiochila deflexifolia Steph., Species Hepaticarum 6: 145 (1917) = **Plagiochila circinalis** (Lehm. & Lindenb.) Lehm. & Lindenb. ex Lindenb.

Original material: Tasmania (Weymouth legit).

Plagiochila deltoidea Lindenb., Species Hepaticarum 5: 132 (1843)

Original material: in portu Dusky Bay dicto Noave Zeelandiae, in terra van Diemen (Fraser. Herb. Hookeri); in Barbadoes insula (Herb. Neesii ab Es.).

Plagiochila deltoidea var. *pachydictyon* Herzog, Hepaticae Selecti et Critici 11: 552 (1939) = **Plagiochila fasciculata** Lindenb.

This synonymy has not been previously proposed. Renner (2018) saw original material, though was unaware of the specimen's status at the time.

Plagiochila dendroides (Nees) Lindenb., Synopsis Hepaticarum 2: 146 (1845) = **Chiastocaulon dendroides** (Nees) Carl

Basionym: *Jungermannia dendroides* Nees

Plagiochila dicksonii Hook.f. & Taylor, London Journal of Botany 5: 267 (1846) = **Dinckleria fruticella** (Hook.f. & Taylor) Heinrichs & J.J.Engel

Plagiochila falcata (Hook.) Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 5: 649 (1847) ≡ **Adelanthus falcatus** (Hook.) Mitt.

Basionym: *Jungermannia falcata* Hook.

Plagiochila fasciculata Lindenb., Species Hepaticarum 1: 7 (1839)

Original material: In nova Hollandia a Frazero inventa asservatur in herbario cl. Hookeri, qui specimina communicavit.

Plagiochila fasciculata var. *labillardiereana* Gottsche, Linnaea: ein Journal für die Botanik in ihrem ganzen Umfange, oder Beiträge zur Pflanzenkunde 28: 547 (1856) = **Plagiochila fasciculata** Lindenb.

Original material: Labillardiere, in Herbario Webbiano e Terra van Diemen.

Plagiochila fasciculata var. *muelleriana* Gottsche, Linnaea: ein Journal für die Botanik in ihrem ganzen Umfange, oder Beiträge zur Pflanzenkunde 28: 547 (1856) = **Plagiochila fasciculata** Lindenb.

Original material: Habitat var B in truncis putrescentibus valium umbrosarum tracius Dandenon-Range, (ubi male et female mense Januario 1853 lecta est, no. 7) apud Melbourne, et in Sealers Cove (n. 162).

Plagiochila ferdinandi-muelleri Steph., Species Hepaticarum 2: 455 (1906) = **Plagiochila arbuscula** (Brid. ex Lehm. & Lindenb.) Lindenb.

Original material: Australia, Queensland (Ferd. von Muller).

Plagiochila fragmentissima Inoue & R.M.Schust., Journal of the Hattori Botanical Laboratory 34: 155 (1971)

Original material: New Zealand: in deep, moist Beech-Rimu forest, near shore, Deep Cove, Doubtful Sd., ca. 10–250 ft, Fiordland Natl. Park, South Island, *R.M.Schuster 53315* (holo: MASS; iso: TNS).

Plagiochila fruticella (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 5: 639 (1847) = **Dinckleria fruticella** (Hook.f. & Taylor) Heinrichs & J.J.Engel

Basionym: *Jungermannia fruticella* Hook.f. & Taylor

#Plagiochila furcata Steph., Bulletin de la Societe Royale de Botanique de Belgique 31: 120 (1892)

Original material: Madagascar, Antsianaka. leg. Perrot.

Plagiochila furcata does not occur in Australia (Renner 2018).

Plagiochila fuscella (Hook.f. & Taylor) Taylor & Hook.f. ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 5: 648 (1847)

Basionym: *Jungermannia fuscella* Hook.f. & Taylor

Plagiochila geminifolia Mitt., Flora Vitiensis 408 (1871)[1873]

Original material: Viti (Seemann). Also in Samoa (Powell n. 50).

#Plagiochila gigantea Lindenb., Species Hepaticarum 2-4: 115 (1840)

Original material: Hab. In sinu Dusky bay dicto, apud Novam Zeelandiam. D. Menzies, 1791.

Plagiochila gigantea does not occur in Australia, reports of this species from Queensland by Engel, among others, are based on his misunderstanding that *Plagiochila baileyana* is the same as *Plagiochila gigantea*.

#Plagiochila gregaria (Hook.f. & Taylor) Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 5: 654 (1847)

Basionym: *Jungermannia gregaria* Hook.f. & Taylor

Plagiochila gregaria is endemic to New Zealand. Previous reports for Australia are based on misidentifications of *Plagiochila fragmentissima* and other species.

Plagiochila hampeana Gottsche, Botanische Zeitung (Berlin) 16(Beil.): 37 (1858)

Original material: None cited.

Plagiochila hartziana Pearson, Kew Bulletin 2: 72 (1924)

Original material: None cited.

Plagiochila incurvicolla (Hook.f. & Taylor) Taylor & Hook.f. ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 5: 651 (1847)

Basionym: *Jungermannia incurvicolla* Hook.f. & Taylor

#Plagiochila inflata Steph., Species Hepaticarum 2: 376 (1903)

Original material: Nova Guinea orientalis (Micholitz).

Plagiochila inflata does not occur in Australia (Renner 2018).

Plagiochila intertexta Hook.f. & Taylor, London Journal of Botany 5: 267 (1846)

Original material: Norfolk Island, Allan Cunningham.

Plagiochila inversa Sande Lac., Annales Musei Botanici Lugduno-Batavi 1(10): 289, n. 1, t. 7 (1864) ≡ **Wettsteinia inversa** (Sande Lac.) Schiffn.

Original material: Hab. Iava in m. Gede: Korthals.

Plagiochila kingiana Gottsche, Annales des Sciences Naturelles; Botanique 8: 323 (1857) = **Plagiochila strombifolia** Taylor ex Lehm.

Original material: Habitat in Novae Hollandiae insula King, ubi sterilis et cum perigoniis, a cel. Guichenot lecta est (Herb. Mus. Paris no. 22).

Plagiochila lamellata M.A.M.Renner, Telopea 21: 314 (2018)

Original material: Queensland: Daintree National Park, track to Manjal Jimalji, between coral fern patch and split rock, 16°23′29″S 145°17′29″S, 1025 m, 19 May 2014, *M.A.M. Renner 6976 & T.C. Wilson* (holo: NSW 858927; iso: BRI, CANB, G, SUVA).

Plagiochila linguifolia De Not., Memoria della Reale Accademia delle Scienze Torino, ser. 2 28: 277 (1874) ≡ **Denotarisia linguifolia** (De Not.) Grolle

Plagiochila lyallii Mitt., Flora Novae-Zelandiae 2(6): 132 (1854) = **Plagiochila colensoi** Hook.f. & Taylor

Original material: Northern and Middle Islands; Auckland, Sinclair. Wairarapa valley, Colenso, Port Preservation and Milford Sound, Lyall.

Plagiochila meridionalis M.A.M.Renner, Telopea 21: 355 (2018)

Original material: Queensland: Macpherson Range, west of Toolona Lookout, 28°15′37″S, 153°10′19″E, 1176 m, 6 Mar. 2014, *M.A.M. Renner 6826 & A.E. Orme* (holo: NSW 858805; iso: BRI, CANB, G, MEL)

Plagiochila metcalfii Steph., Species Hepaticarum 2: 337 (1903) = **Plagiochila paucidens** Steph.

Original material: Norfolk Insula (Metcalf).

Plagiochila microdictyon Mitt., Flora Novae-Zelandiae 2(6): 131 (1854)

Original material: Northern Island: Bay of Islands with P. prolifera, amongst Sendnera attenuata, J.D.H.

Plagiochila microdictyon is endemic to New Zealand (Renner 2018).

Plagiochila minax M.A.M.Renner, Telopea 21: 326 (2018)

Original material: Queensland: North Kennedy, Tully Gorge National Park, Tully River, Cochable Creek catchment, Cannabullen Creek walking track, Whispy Falls, 17°43′34″S, 145°37′22″E, 234 m, 11 May 2014, *M.A.M. Renner 6958 & T.C. Wilson* (holo: NSW 858855, iso: BRI, CANB, G, LAE, MEL, SUVA).

Plagiochila minutissima M.A.M.Renner, Telopea 21: 306 (2018)

Original material: Queensland: Cook, Wooroonooran National Park, Bartle Frere, stream flowing past Western Summit camp from summit ridge north of Bartle Frere, 17°23′45″S, 145°48′55″E, 1459 m, 2 Sep 2014, *M.A.M. Renner 7312 & L.J. Gray* (holo: NSW 880483; iso: BRI, CANB, G, LAE, SUVA).

Plagiochila monoica Steph., Species Hepaticarum 2: 315 (1903) ≡ **Pedinophyllum monoicum** (Steph.) Grolle

Plagiochila monospiris Inoue & Grolle, Journal of the Hattori Botanical Laboratory 36: 489 (1972)

Original material: New Guinea, Goodenough Isl., east slope, 1600 m alt, leg. Brass no. 24834 (TNS, duplicates in FH, JE).

Plagiochila multifurcata Steph., Species Hepaticarum 2: 451 (1904) = **Plagiochila teysmannii** Sande Lac.

Original material: Australia, Queensland (Bailey).

Plagiochila nebulosa M.A.M.Renner, Telopea 21: 337 (2018)

Original material: Queensland: North Kennedy: Tully Falls National Park, Tully Falls Road, track to Rhyolite Pinnacle from Charmillan Creek, 17°42′20″S 145°32′48″E, 1005 m, 1 Jun 2014, *M.A.M. Renner 7112 & T.C. Wilson* (holo: NSW 852994; iso: BRI, CANB, G, SUVA).

Plagiochila neohoweana Pearson, University of California Publications in Botany 10: 315 (1923) = **Plagiochila strombifolia** Taylor ex Lehm.

Original material: None cited.

Plagiochila norfolkiensis Steph., Bulletin de l'Herbier Boissier, ser. 2, 3: 877 (1903)

Original material: Australia, Norfolk Island (Robinson).

Plagiochila obscura Colenso, Transactions and Proceedings of the New Zealand Institute 19: 281 (1887) = **Plagiochila stephensoniana** Mitt.

Original material: On decaying logs and branches, we dark woods near Norsewood, County of Waipawa; 1886: W.C.

Plagiochila obtusa Lindenb., Species Hepaticarum 2-4: 42 (1840)

Original material: in montosis Javae insulae ad terram rarior. Legerund clar. viri Blume et Reinwardt.

Plagiochila pachycephala De Not., Epatiche de Borneo: 14 (1874) ≡ **Chiastocaulon pachycephalum** (De Not.) Herzog

Plagiochila paucidens Steph., Species Hepaticarum 2: 297 (1903)

Original material: Tahiti (Vesco).

Plagiochila pendula Hampe & Gottsche, Fragmenta Phytographiae Australiae 11(Suppl.): 55 (1880), *nom. inval.* = **Plagiochila queenslandica** Steph.

Plagiochila prolifera Mitt., Flora Novae-Zelandiae 2: 130 (1855) ≡ **Chiastocaulon proliferum** (Mitt.) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs

Original material: Hab. Northern Island : Bay of Islands ; amongst Sendtnera attenuala (Mitten), J. D. H.

Plagiochila pusilla Mont., Annales des Sciences Naturelles; Botanique 19: 246 (1843) = **Calyptrocolea falcata** (Hook.) R.M.Schust.

Original material: Hab. inter Muscos et Hepaticas inprimis Mastigophorae ulothricis caules, in Novâ-Hollandiâ (Van Diemen) rarissima. Species P. conjugatae var, falcatae affinis, diversa tamen.

Plagiochila queenslandica Steph., Species Hepaticarum 2: 451 (1904)

Original material: Queensland (Bailey); New-South Wales (Camara, Shaw, Stephen Johnson, Watts, F. v. Muller).

Plagiochila radiculosa Mitt., Flora Novae-Zelandiae 2(6): 132 (1854) = **Cryptoplagiochila radiculosa** (Mitt.) S.D.F.Patzak, M.A.M.Renner & Heinrichs

Original material: on Weinmannia bark, Tarawera.

#Plagiochila ramosissima (Hook.) Lindenb., Species Hepaticarum 2–4: 87 (1840)

Basionym: *Jungermannia ramosissima* Hook.

Plagiochila ramosissima is endemic to New Zealand (Renner 2018).

Plagiochila ratkowskyana Inoue, Brunonia 3(1): 141 (1980) as '*ratkowskiana*'

Original material: Tasmania: Mt Wedge, ca. 1000 m, *A.V. Ratkowsky 78/59* (holo: TNS; iso: hb. Ratkowsky).

Plagiochila remyana Steph., Species Hepaticarum 6: 203 (1924), *nom. illeg.* ≡ **Plagiochila sydneyensis** Beauverd

Original material: Australia, prope Sydney (Remy legit).

#Plagiochila renitens (Nees) Lindenb., Species Hepaticarum 2-4: 90 (1840)

Basionym: *Jungermannia renitens* Nees

Plagiochila renitens does not occur in Australia (Renner 2018).

Plagiochila retrospectans Nees, Species Hepaticarum 5: 123 (1843)

Original material: in Nova Hollandia (Sieber); in Brasilia (Com. de Lambert. Herb Hookeri et Rudolphii).

Plagiochila robinsonii Steph., Bulletin de l'Herbier Boissier, sér. 2, 4: 24 (1903) = **Plagiochila sandei** Dozy ex Sande Lac.

Original material: Norfolk Insula (Robinson).

Plagiochila rossii Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 130 (1914) = **Plagiochila fasciculata** Lindenb.

Original material: Australia, N. S. Wales (The Jungle, Blackheath): Watts, 1035.

Plagiochila sandei Dozy ex Sande Lac., Nederlandsch Kruidkundig rchief. Verslagenen Mededelingen der Nederlandsche Botanische Vereeniging 4: 92 (1856)

#Plagiochila sciophila Nees ex Lindenb., Species Hepaticarum 2-4: 100 (1840)

Plagiochila sciophila does not occur in Australia (Renner 2018).

Plagiochila serrifolia Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 130 (1914) = **Acrobolbus epiphytus** (Colenso) Briscoe

Original material: Australia, New South Wales, (Wyong) Watts, 1100.

Plagiochila simpsonii W.Martin & E.A.Hodgs., Transactions and Proceedings of the Royal Society of New Zealand 78: 497 (1950) = **Chiastocaulon biseriale** (Lehm. & Lindenb.) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs

Plagiochila sinclairii Mitt., Flora Novae-Zelandiae 2(6): 133 (1854) = **Plagiochila intertexta** Hook.f. & Taylor

Original material: Northern Island: Auckland, Sinclair. Bark of trees. Tehawera, Colenso.

Plagiochila singularis Schiffn., Hepaticae der Flora von Buitenzorg: 158 (1900) = **Dinckleria singularis** (Schiffn.) M.A.M.Renner, Schäf.-Verw. & Heinrichs

Plagiochila stephensoniana Mitt., Flora Novae-Zelandiae 2(6): 133 (1854)

Original material: Northern and Middle Islands: ravines near Wellington, Stephenson. Thomson's Sound, Port Cooper, and Port Nicholson, Lyall. Ruahine mountains and East Coast, Colenso.

Plagiochila streimannii Inoue, Journal of Japanese Botany 63: 365 (1988)

Original material: Papua New Guinea: Nauti Logging Area; upper Watutu River, 10 km SW of Bulolo, ca. 1400 m alt., *H. Streimann 17097* (holo: TNS; iso: CBG, JE, LAE, NICH).

Plagiochila strombifolia Taylor ex Lehm., Novarum et Minus Cognitarum Stirpium Pugillus 8: 5 (1844)

Original material: Habitat in Terro van Diemen, ubi legit cel. Gunn (Hb. Greville et Tayl.).

Plagiochila stuartiana Gottsche, Linnaea: ein Journal für die Botanik in ihrem ganzen Umfange, oder Beiträge zur Pflanzenkunde 28: 548 (1856) = **Plagiochila strombifolia** Taylor ex Lehm.

Original material: in insula van Diemen a cel. C. Stuart lecta.

Plagiochila subfasciculata Colenso, Transactions and Proceedings of the New Zealand Institute 20: 247 (1888)

Original material: On logs and trunks of trees, wet woods near Danneverke, County of Waipawa; 1887: W.C.

Plagiochila sydneyensis Beauverd, Species Hepaticarum 6: 572 (1924)

Replaced synonym: Plagiochila remyana Steph.

Plagiochila taylorii Steph., Species Hepaticarum 2: 459 (1904) = **Plagiochila fuscella** (Hook.f. & Taylor) Taylor & Hook.f. ex Gottsche, Lindenb. & Nees

Original material: Tasmania (Weymouth).

Plagiochila teysmannii Sande Lac., Synopsis Hepaticarum Javanicarum: 12 (1856)

Plagiochila trapezoidea Lindenb., Species Hepaticarum 2-4: 112 (1840)

Original material: in Java insula ad terram.

In Australia the name *Plagiochila trapezoidea* has been misapplied to *Plagiochila lamellata*.

Plagiochila traversii Steph., Species Hepaticarum 2: 460 (1904) = **Plagiochila intertexta** Hook.f. & Taylor

Original material: Chatham Island (Travers).

Plagiochila vampira M.A.M.Renner, Telopea 21: 311 (2018)

Original material: Queensland: Cook: Dinden National Park, Kahlpalim Rock, between summit and junction with Ridge Track, 17°0′59″S 145°37′49″E 1200 m, 12 May 2014, *M.A.M. Renner 6929 & T.C. Wilson* (holo: NSW 855503; iso: BRI, CANB, G).

Plagiochila victoriae Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 131 (1914) = **Plagiochila fasciculata** Lindenb.

Original material: Australia, Victoria (Lorne: leg Miss E. L. Watts) Hb. Watts, 910.

Plagiochila vitiensis Mitt., Bonplandia 9: 367 (1861)

Original material: Seeman, No. 862.

Plagiochila wattsii Steph. ex Rodway, Papers and Proceedings of the Royal Society of Tasmania 1917: 105 (1918) = **Cryptoplagiochila radiculosa** (Mitt.) S.D.F.Patzak, M.A.M.Renner & Heinrichs

Original material: On Fagus log, Pioneer track, Blue Tier (Weymouth).

Plagiochilion S.Hatt., Biosphaera 1: 7 (1947) = **Chiastocaulon** Carl

Plagiochilion conjugatum (Hook.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 285 (1963) ≡ **Chiastocaulon conjugatum** (Hook.) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs

Basionym: *Jungermannia conjugata* Hook.

Plagiochilion oppositum (Reinw., Blume & Nees) S.Hatt., Biosphaera 1: 7 (1947) = **Chiastocaulon oppositum** (Reinw., Blume & Nees) S.D.F.Patzak, M.A.M.Renner, Schäf.-Verw. & Heinrichs

Basionym: *Jungermannia opposita* Reinw., Blume & Nees

Plagiochilion pachycephalum (De Not.) Inoue, Journal of the Hattori Botanical Laboratory 27: 55 (1964) ≡ **Chiastocaulon pachycephalum** (De Not.) Herzog

Basionym: *Plagiochila pachycephala* De Not.

Plectocolea eenii S.W.Arnell, Svensk Botanisk Tidskrift 57: 191 (1963) = **Solenostoma montanum** (Steph.) Váňa

Plectocolea infusca Mitt., Transactions of the Linnean Society of London, 2nd series: Botany 3: 196 (1891) ≡ **Solenostoma infuscum** (Mitt.) Hentschel.

Pleuroschisma crenata Trevis., Herbarium Cryptogamicum Trevisanianum 2: 30. 1853. ≡ **Bazzania corbierei** (Steph.) Meagher

Pleuroschisma sect. *Lepidozia* Dumort., Sylloge Jungermannidearum Europae indigenarum: 69 (1831) ≡ **Lepidozia** (Dumort.) Dumort.

Pleurozia Dumort., Recueil d'Observations sur les Jungermanniacees: 15 (1835)

Pleurozia articulata (Lindb.) Schiffn., Hepaticae. Die Naturlichen Pflanzenfamilien 1(3): 115 (1893)

Basionym: *Physiotium articulatum* Lindb.

Pleurozia ferdinandi-muelleri Steph., Species Hepaticarum 4: 237 (1910) = **Pleurozia articulata** (Lindb.) Schiffn.

Pleurozia muelleri (Gottsche ex J.B.Jack) Steph., Species Hepaticarum 4: 236 (1910) = **Pleurozia articulata** (Lindb.) Schiffn.

Basionym: *Physiotium muelleri* Gottsche ex J.B.Jack

Plicanthus R.M.Schust., Nova Hedwigia 74: 484 (2002)

Plicanthus hirtellus (F.Weber) R.M.Schust., Nova Hedwigia 74: 492 (2002)

Basionym: *Jungermannia hirtella* F.Weber

Podanthe squamata Taylor, London Journal of Botany 5: 413 (1846) = **Lethocolea pansa** (Taylor) G.A.M.Scott & K.G.Beckm.

Original material: Hab. Swan River. Mr. James Drummond.

Podomitrium Mitt., Flora Novae-Zelandiae 2(7): 164 (1855)

Podomitrium phyllanthus (Hook.) Mitt., Flora Novae-Zelandiae 2(7): 164 (1855)

Basionym: *Jungermannia phyllanthus* Hook.

Polyotus subsimplex Austin, Bulletin of the Torrey Botanical Club 6: 46 (1875) ≡ **Tetracymbaliella subsimplex** (Austin) J.J.Engel

Original material: Tasmania, Mt Wellington, 1850, Mossman, herb. Sullivan.

Polyotus taylorii Gottsche, Synopsis Hepaticarum 2: 246 (1845) '*taylori*' ≡ **Lepidolaena taylorii** (Gottsche) Trevis.

Original material: Habitat in Nova Zeelandiae. Verisimile a Menziesio ad Sinum Dusky Bay lecta (Hooker in Hb. L. Taylor in Hb. G.).

Porella L., Species Plantarum 2: 1106 (1753)

Porella crawfordii Steph., Hedwigia 28: 270 (1889)

Original material: New England, Moona near Walcha leg. A. R. Cranford 1884 m. et per. pauca frustula inter Porellam Stangeri, Queensland, Toowoomba, Hartmann 1876; Queen land F. M. Bailey (Herb. Brotherus Nr. 11). N. S. Wales Rev. Dr. Woolls. 1884 c. per et m.

Porella elegantula (Mont.) E.A.Hodgs., Svensk Botanisk Tidskrift 42: 77 (1948)

Basionym: *Madotheca elegantula* Mont.

Porella queenslandica (Steph.) S.Hatt., Bulletin of the National Science Museum, Tokyo. Series B, Botany 11: 53 (1985) = **Porella crawfordii** Steph.

Basionym: *Madotheca queenslandica* Steph.

Porella viridissima (Mitt.) Grolle Journal of the Hattori Botanical Laboratory 36: 83 (1972)

Basionym: *Madotheca viridissima* Mitt.

Porella viridissima was reported for Norfolk Island by So (2002b). So's concept of *P. viridissima* was too broad and the Norfolk Island plants do not agree with the lectotype of *P. viridissima*, rather they belong to an undescribed species that also occurs in northern New South Wales. This undescribed species is the subject of ongoing investigations into Australasian *Porella*. *Porella viridissima* does not occur in Australia.

Preissia Corda, Naturalientausch 12: 647 (1829)

Preissia commutata (Lindenb.) Nees, Synopsis Hepaticarum 4: 539 (1846) = **Marchantia quadrata** Scopoli

Basionym: *Marchantia commutata* Lindenb.

Prionolejeunea semperiana Gottsche ex Steph., Species Hepaticarum 5: 227 (1913) ≡ **Allorgella semperiana** (Gottsche ex Steph.) Bechteler, G.E.Lee, Schäf.-Verw. & Heinrichs

Original material: Hab. Insula Luzon. Java.

Protolophozia (R.M.Schust.) Schljakov, Novosti Sistematiki Nizshikh Rastenii 16: 204 (1979)

Basionym: *Lophozia* subg. *Protolophozia* R.M.Schust.

Protolophozia androgyna R.M.Schust. ex Váňa & L.Söderstr. Phytotaxa 76:51 (2013)

Original material: Tasmania: *R.M. Schuster RMS 50513* (holo: F).

Protolophozia herzogiana (E.A.Hodgs. & Grolle) Váňa & L.Söderstr., Phytotaxa 76: 51 (2013)

Basionym: *Lophozia herzogiana* E.A.Hodgs. & Grolle

Protolophozia tasmanica (R.M.Schust.) Váňa & L.Söderstr., Phytotaxa 76: 52 (2013)

Basionym: *Lophozia tasmanica* R.M.Schust.

Pseudocephalozia R.M.Schust., Nova Hedwigia 10: 21 (1965)

Pseudocephalozia paludicola R.M.Schust., Nova Hedwigia 10: 21, Fig. 1-3 (1965)

Original material: Tasmania: Lake St Clair National Park, E slope of Mt Rufus, c. 3800–4100 ft, *R.M. Schuster 50512*.

Pseudomarsupidium Herzog, Svensk Botanisk Tidskrift 47: 31 (1953)

Pseudomarsupidium piliferum (Steph.) Herzog ex Grolle, Transactions of the British Bryological Society 4: 443 (1963)

Basionym: *Marsupidium piliferum* Steph.

Psiloclada Mitt., Flora Novae-Zelandiae 2(6): 143 (1854)

Psiloclada clandestina Mitt., Flora Novae-Zelandiae 2(6): 143 (1854)

Original material: Hab. Northern Island: amongst Mosses, Wellington, Stephenson; a single stem.

Ptychanthus Nees, Naturgeschichte der Europaischen Lebermoose 3: 211 (1838)

Ptychanthus pycnocladus Taylor, New Hepaticae. London Journal of Botany 5: 385 (1846) ≡ **Acrolejeunea pycnoclada** (Taylor) Schiffn.

#Ptychanthus stephensonianus (Mitt.) Steph., Species Hepaticarum 4: 754 (1912)

Basionym: *Lejeunea stephensoniana* Mitt.

Ptychanthus stephensonianus does not occur in Australia.

Ptychanthus striatus (Lehm. & Lindenb.) Nees, Naturgeschichte der Europaischen Lebermoose 3: 212 (1838)

Basionym: *Jungermannia striata* Lehm.

Ptychanthus tumidus Nees, Naturgeschichte der Europaischen Lebermoose 3: 213 (1838) ≡ **Schiffneriolejeunea tumida** (Nees) Gradst.

Ptychocoleus aulacophorus (Mont.) Trevis., Memorie del Reale Istituto Lombardo di Scienze e Lettere, Serie 3, Classe di Scienze Matematiche e Naturali 4: 405 (1877) ≡ **Acrolejeunea aulacophora** (Mont.) Steph.

Basionym: *Phragmicoma aulacophora* Mont.

Ptychocoleus cristilobus (Steph.) Steph., Species Hepaticarum 5: 41 (1912) ≡ **Caudalejeunea cristiloba** (Steph.) Gradst.

Basionym: *Acrolejeunea cristiloba* Steph.

Ptychocoleus parvus Steph., Species Hepaticarum 5: 50 (1912) = **Acrolejeunea securifolia** subsp. **securifolia**

Original material: Hab. Nova Guinea ; Australia, New South Wales, Queensland.

Ptychocoleus planiusculus (Mitt.) Verd., Annales Bryologici Supplement 4: 126 (1934) ≡ **Spruceanthus planiusculus** (Mitt.) X.Q.Shi, R.L.Zhu & Gradst.

Basionym: *Lejeunea planiuscula* Mitt.

Ptychocoleus wildii (Steph. ex Watts) Steph., Species Hepaticarum 5: 60 (1912) = **Acrolejeunea securifolia** subsp. **securifolia**

Basionym: *Acrolejeunea wildii* Steph. ex Watts

Pycnolejeunea (Spruce) Schiffn., Hepaticae. Die Naturlichen Pflanzenfamilien 1(3): 118, 124 (1893)

Basionym: *Lejeunea* subg. *Pycnolejeunea* Spruce

Pycnolejeunea bidentula Steph., Botanisches Centralblatt 60(4): 107 (1894) ≡ **Lepidolejeunea bidentula** (Steph.) R.M.Schust.

#Pycnolejeunea contigua (Nees) Grolle, Journal of the Hattori Botanical Laboratory 45: 179 (1979)

Basionym: *Jungermannia contigua* Nees

The distribution of *Pycnolejeunea contigua* given by He (1999) does not include Australia, and there are no specimens supporting the presence of this species in Australia held by Australian herbaria. The status of *Pycnolejeunea contigua* in Australia is therefore regarded as unresolved.

Pycnolejeunea curvatiloba Steph., Species Hepaticarum 5: 635 (1914) = **Cheilolejeunea trapezia** (Nees) Kachroo & R.M.Schust.

Original material: Hab. Australia, Norfolk Island.

#Pycnolejeunea densistipula (Lehm. & Lindenb.) Steph., Species Hepaticarum 5: 602 (1914)

Basionym: *Lejeunea densistipula* Lehm. & Lindenb.

Pycnolejeunea densistipula does not occur in Australia.

Pycnolejeunea falsinervis (Sande Lac.) Schiffn., Conspectus Hepaticarum Archipelagi Indici 258 (1898) ≡ **Cheilolejeunea falsinervis** (Sande Lac.) Kachroo & R.M.Schust.

Basionym: *Lejeunea falsinervis* Sande Lac.

Pycnolejeunea fitzgeraldii Steph., Species Hepaticarum 5: 631 (1914) = **Cheilolejeunea ventricosa** (Schiffn.) X.-L.He

Original material: Hab. Nova Guinea.

Pycnolejeunea grandiocellata Steph., Botanisk Tidsskrift 24: 279 (1902)

Original material: Jungle near Klong Munse. On trees.

Pycnolejeunea integristipula J.B.Jack & Steph., Botanisches Centralblatt 60: 107 (1894) ≡ **Lepidolejeunea integristipula** (J.B.Jack & Steph.) R.M.Schust.

Original material: Hab. Viti-Ovalau in monte Tana-lailai. Pauca specimina sterilia Taxi-Lejeuneam umbilicatum perrepentia.

Pycnolejeunea longidens Steph., Species Hepaticarum 5: 634 (1914) ≡ **Cheilolejeunea longidens** (Steph.) R.M.Schust. & Kachroo

Original material: Hab. Australia, Queensland.

Pycnolejeunea longiloba Steph. ex G.Hoffm., Annales Bryologici 8: 114 (1935) ≡ **Cheilolejeunea longiloba** (Steph. ex G.Hoffm.) Kachroo & R.M.Schust.

Pycnolejeunea schiffneri Steph. ex Schiffn., Conspectus Hepaticarum Archipelagi Indici: 260 (1898) ≡ **Siphonolejeunea schiffneri** (Steph. ex Schiffn.) Herzog

Pycnolejeunea ventricosa Schiffn., Die Forschungsreise S.M.S. Gazelle 4(4): 32 (1889)[1890], *nom. inval.* ≡ **Cheilolejeunea ventricosa** (Schiffn.) X.-L.He

Pycnolejeunea ventricosa Schiffn. ex P.Syd., Just's Botanischer Jahresbericht 19(1): 246. 1894. ≡ **Cheilolejeunea ventricosa** (Schiffn.) X.-L.He

Pycnolejeunea vittata Steph. ex G.Hoffm., Annales Bryologici 8: 115 (1935) ≡ **Cheilolejeunea vittata** (Steph. ex Hoffm.) R.M.Schust. & Kachroo

Pycnolejeunea wattsiana Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 132 (1914) = **Cheilolejeunea meyeniana** (Gottsche, Lindenb. & Nees) R.M.Schust. & Kachroo

Radula Dumort., Commentationes Botanicae: 112 (1822), *nom. cons.*

Radula acutiloba Steph., Hedwigia 28: 271 (1889)

Original material: Queensland leg. F. M. Bailey (Herb. Brotherus.)

Radula aneurismalis (Hook.f. & Taylor) Nees ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 2: 262 (1845)

Basionym: *Jungermannia aneurismalis* Hook.f. & Taylor

Radula anisotoma M.A.M.Renner, PhytoKeys 27: 30 (2013)

Original material: Australia: Norfolk Island: Mount Pitt Reserve, Filmy Fern Trail, off Selwyn Pine Road, 29°01′S, 167°58′E, 130 m, 3 Dec 1984, *H. Streimann 32084A* (holo: CANB 650459).

Radula australiana K.Yamada, Journal of the Hattori Botanical Laboratory 51: 323 (1982)

Original material: New South Wales: Merrits Creek 3 km east of Mt Kosciuszko, 1870 m, 9 Feb. 1978, *H. Streimann 5358A* (holo: NICH, iso: CANB!).

Radula boryana (F.Weber) Nees ex Mont., Annales des Sciences Naturelles; Botanique 18: 13 (1842) ≡ **Cladoradula boryana** (F.Weber) M.A.M.Renner, Gradst., Ilk.-Borg. & F.R.Oliveira-da-Silva

Basionym: *Jungermannia boryana* F.Weber

Radula buccinifera (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 2: 261 (1845)

Basionym: *Jungermannia buccinifera* Hook.f. & Taylor

Radula compacta Castle, Revue Bryologique et Lichenologique 32: 43 (1964) = **Radula aneurismalis** (Hook.f. & Taylor) Nees ex Gottsche, Lindenb. & Nees

Original material: Tasmania: East Coast, Pioneer Track, on Myrtle in forest, 2100 ft., 1911, *W.A. Weymouth 1384* (BM).

Radula demissa M.A.M.Renner, PhytoKeys 27: 53 (2013)

Original material: New Zealand: North Island: Puaiti Bush south of Rotorua, ca. 1,600 ft, 20 Jun. 1931, *K.W. Allison* (holo: CHR 587329; iso: AK, F, NSW, WELT).

Radula fauciloba Steph., Species Hepaticarum 4: 188 (1910) = **Radula retroflexa** Taylor

Original material: Hab. Nova Guinea

Radula forficata M.A.M.Renner, Australian Systematic Botany 26: 307 (2013)

Original material: Queensland: Cook: Mt Lewis Forest Reserve, Mount Lewis Road, 16°33′2″S, 145°16′48″E, 950 m, 13 Jul. 2005, *M.A.M. Renner 2118 & E.A. Brown* (holo: NSW 878032).

Radula gottscheana Taylor, London Journal of Botany 5: 374 (1846) = **Cladoradula boryana** (F.Weber) M.A.M.Renner, Gradst., Ilk.-Borg. & F.R.Oliveira-da-Silva

Original material: Hab. St. Domingo. Dickson. 1814.

Radula gottscheana Taylor was listed in McCarthy (2003) as a *pro parte* synonym of *Radula javanica*, but it is likely that the name McCarthy intended to list was *Radula gottscheana* F.Muell.

Radula gottscheana F.Muell., Fragmenta Phytographiae Australiae, Supplementum ad Volumen Undecimum 62 (1880), *nom. illeg.* ≡ **Radula javanica** Gottsche

Basionym: *Radula javanica* Gottsche

Von Mueller correctly stated that the original material of *Radula javanica* is mixed. He summarised other workers attempts to extract different elements from *Radula javanica*, and erect new taxa for them: 1) *Radula campanigera* by Montagne (1844); and 2) *Radula colliculosa* by Mitten (1861). In the first instance von Mueller is incorrect, *Radula campanigera* was published the year before, and possibly independently of, *Radula javanica*. In the second, *Radula colliculosa* Mitten was published based on specimens collected from Ceylon by Gardner and Thwaites. These may be derived from the same gatherings as those cited by Gottsche as 'Hb. Hk. n. 51, 56', but we have not been able to check. When describing *R. colliculosa*, the reference Mitten made to *Radula javanica* was to note that *Radula javanica*, as reported by Menzies from Hawaii, also occurred in Ceylon: "Etiam hujus loci est illa *R. javanica* a Menzies ab Ohwaiee insularum Sandwichiense relata." von Mueller then stated, correctly, that another gathering among the original material, from Caroline Islands collected by Strong contained a third element that was not the same as the two taxa proposed by Montagne and Mitten respectively. Von Mueller equated two specimens from Australia, from Rockingham Bay leg. Dallachy and Keppel Bay leg. Thozet, with the Caroline Island collection. We have seen two of these three gatherings, and von Mueller was correct in this equation for those two. von Mueller explicitly related the Australian specimens to the Strong syntype of *Radula javanica* and used the name *Radula javanica* to make that connection. He then objected to the name *Radula javanica*, as proposed by Gottsche for this plant, presumably on geographical grounds associated with the Australian occurrences, and proposed a replacement name, *Radula gottscheana* F.Muell. in honour of Gottsche. In this von Mueller fulfilled the requirements for valid publication by providing reference to the basionym of his replacement name (Art. 41.3), but his justification for proposing a replacement is captured by Article 51.1 as illegitimate as you can't reject a

name merely because it is disagreeable. The replacement name proposed by von Mueller is also a later homonym.

Radula hicksiae K.Yamada, Cryptogamie - Bryologie Lichenologie 5: 191 (1984)

Original material: Queensland: Mt. Bartle Frere, slope of Broken, on bark of tree in rainforest, 1 Aug. 1982, *M.L. Hicks 11047* (holo: NICH; iso: BOON).

Radula imposita M.A.M.Renner, PhytoKeys 27: 65 (2013)

Original material: Queensland: Cook: Daintree National Park, Mount Lewis, head- waters of Leichhardt Creek flowing down the south-west flanks of the summit, epiphyllous on Normandia frond overhanging stream, 1150 m, 16°35′03″S, 145°16′33″E, 27 May 2012, *M.A.M. Renner 6356, V.C. Linis & E.A. Brown* (holo: NSW 896812; iso: BRI).

Radula javanica Gottsche, Synopsis Hepaticarum 2: 257 (1845)

Original material: Habitat in Java insula ad Sadjta Prov. Bantatn (Blume) ; in Insula Mauritii (Sieber); in Nilgherries (Mont.) ; in Owaihi et Ceylon insulis (Hb. Hk. n. 51. 56); in Insulis Carolinis, Ualan et Strong (Lesson in Hb. Kunth. et Bongard, Mertens in Hb. Acad. Petrop.).

Radula jovetiana K.Yamada, Cryptogamie - Bryologie Lichenologie 5: 193 (1984)

Original material: Queensland: Devils Thumb, west of Mossman, over rock outcrop in rainforest, 1150 m, 9 Oct. 1982, *M.L. Hicks 11263* (holo: NICH; iso: BOON).

Radula kilgourii M.A.M.Renner, Australian Systematic Botany 26: 313 (2013)

Original material: Queensland: Cook: Cairs, Saddle Mountain above Smithfield, 16°49′8″S, 145°39′55″E, 620 m, 20 Jan. 2011, *M.A.M. Renner 5042 & C.D. Kilgour* (holo: NSW 970350; iso: BRI).

Radula kurzii Steph., Hedwigia 23: 153 (1884)

Original material: Hab. South Andaman. leg. Kurz. (Hb. Gottsche.)

Radula kurzii does not occur in Australia.

Radula lingulata Gottsche, Synopsis Hepaticarum 2: 260 (1845)

Original material: Habitat in Java insula in Provincia Buitenzorg (Miquel in Hb. L.).

Radula loriana Castle, Journal of the Hattori Botanical Laboratory 21: 6 (1959)

Radula madagascariensis Gottsche, Abhandlungen Herausgegeben vom Naturwissenschaftlichen Vereins zu Bremen 7: 349 (1882)

Original material: In Silva Ambaranavaranututa aliis Hepaticis foliosis irre- pentes collegit 6. Dec. 1877 stirpes m et f Dr. Rutenberg.

Radula mittenii Steph., Hedwigia 23: 148 (1884)

Original material: Hab. Australia. Zamtree River. leg. Pentzke (Hb. Mitten.)

Radula multiamentula E.A.Hodgs., Records of the Dominion Museum 4: 122 (1962)

#Radula multiflora Gottsche, Die Forschungsreise S.M.S. "Gazelle" in den Jahren 1874 bis 1876... (Botanik): 20 (1889)

Original material: In insula Neu-Hannover ad litus occidentale, ad arborum et fruticum ramos copiose una cum Dendro-Lejeunia vittata cum periantbiis et c? (20. 7. 75). — Ins. Neu-Mecklen-burg S. 0. c. periantbiis (19. 8. 75).

Radula multiflora does not occur in Australia.

Radula myriopoda M.A.M.Renner, Australian Systematic Botany 26: 323 (2013)

Original material: Queensland: Cook: Wooroonooran National Park, South Johnston River catchment, Maple Creek, Maple Creek Road, 17°42′28″S, 145°41′16″E, 720 m, *M.A.M. Renner 6532, V.C. Linis & E.A. Brown* (holo: NSW 898867; iso: BRI, F).

Radula notabilis M.A.M.Renner, PhytoKeys 27: 77 (2013)

Original material: Queensland: Cook: Wooroonooran National Park, tributary of Babinda Stream 30 m above junction with Babinda Stream, forming conspicuous patches of pendant, procumbent, brown-green shoots on trunk of *Ficus* 26 cm dbh rooted in streambed, 85 m, 17°19′59″S, 145°51′40″E, 3 Apr. 2012, *M.A.M. Renner 6506, V.C. Linis, & E.A. Brown* (holo: NSW 909501; iso: BRI, CANB, F).

Radula novae-hollandiae Hampe, Novarum et Minus Cognitarum Stirpium Pugillus 7: 24 (1838)

Original material: Crescit ad filices in Nova Hollandia.

Radula nymannii Steph., Species Hepaticarum 4: 229 (1910)

Original material: Hab. Nova Guinea.

Radula ocellata K.Yamada, Journal of the Hattori Botanical Laboratory 45: 209 (1979)

Original material: Queensland: The Crater National Park, 35 km S of Atheron, 1200 m alt., on lower trunk of tree, 25 June 1975, *G. Shea 6980* (holo: NICH; iso: hb G. Shea).

Radula oreopsis M.A.M.Renner, Telopea 17: 123 (2014)

Original material: Queensland: Cook: Daintree National Park, Mossman Gorge, Rex Creek, upstream from swingbridge, 16°28′13″S, 145°19′42″E, 105 m, 24 Mar. 2012, *M.A.M. Renner 6270, V.C. Linis & E.A. Brown* (holo: NSW 896415, iso: BRI, F).

Radula ornata E.A.Br. & Pócs, Telopea 9(3): 436 (2001)

Original material: Australia, Queensland. Bellenden Ker National Park, ridge NNW of transmitter, Mt. Bellenden Ker, along the track to head of Mulgrave River, 17°15′45″S, 145°50′55″E, 1460 m alt., *E.A. Brown 95/243a, B.M. Wiecek & K.L. Radford*; 8 August 1995 (holo BRI; iso NSW, EGR).

Radula papulosa Steph., Journal of the Linnean Society, Botany 29: 272 (1892) = **Radula acutiloba** Steph.

Original material: none cited.

Radula parvitexta Steph., Species Hepaticarum 6: 513 (1924) = **Radula robinsonii** Steph.

Original material: Hab. Nova Guinea.

Radula patens K.Yamada, Cryptogamie - Bryologie Lichenologie 5: 197 (1984)

Original material: Queensland: along Saltwater Creek, west of Mossman, on wet shaded rock, 18 Oct. 1982, *M.L. Hicks 11328* (holo: NICH; iso: BOON).

#Radula physoloba Mont., Annales des Sciences Naturelles; Botanique 19: 255 (1843)

Original material: Hab. ad Stictam Deliseam repens in insulis Auckland à cl. Hombron reperta.

Radula physoloba is endemic to New Zealand.

#Radula plicata Mitt., Flora Novae-Zelandiae 2(6): 154 (1854)

Original material: Hab. Northern Island : creeping over a fern with B. buccinata, Auckland, Sinclair.

Radula plicata is endemic to New Zealand.

Radula psychosis M.A.M.Renner, Australian Systematic Botany 26: 328 (2013)

Original material: Queensland: Cook: Dinden National Park, Lamb Range, walking track close to Kahlpalum Rock, 17°00′59″S

145°37′49″E, 1200 m, 24 Jan. 2011, *M.A.M. Renner 5051, C.D. Kilgour & Y. Baba* (holo: NSW 970357; iso: BRI, CANB, F).

Radula pugioniformis M.A.M.Renner, PhytoKeys 27: 84 (2013)

Original material: New South Wales: Central Tablelands, Small gully near Wonga Falls on Lamonds Creek, Barren Grounds Nature Reserve, 34°41′S, 150°43′E, 500 m, 22 Apr. 1992, *R.G. Coveny 16096 & P.D. Hind* (holo: Element 1 within NSW 770504, with a portion separated in a subpacket).

Radula pulchella Mitt. ex Steph., Hedwigia 23: 149 (1884)

Original material: Hab. Australia, Illawarra. leg. Kerbon. (Hb. Mitten.)

Radula queenslandica K.Yamada, Journal of the Hattori Botanical Laboratory 62: 192 (1987)

Original material: Queensland: Mt Bartle Frere, 2 Jun. 1982, *I.G. Stone s.n.* (holo: MUCV 6004; iso: NICH).

Radula ratkowskyana K.Yamada, Journal of Japanese Botany 59: 94 (1984) as '*ratkowskiana*'

#Radula reflexa Nees & Mont., Annales des Sciences Naturelles; Botanique 19: 255 (1843)

Original material: Hab. in Ind. orient, ad Araboinain ubi primus omnium legit celeb. Labillardière, dein in insulis Sandwich inter surcula Sckismatis dïcladl aliquot specimina ejusdem invenit celeb. Gaudichaud. Exemplaria Billardieriana mecum amicissime communicav.it cl. Webb.

Radula reflexa does not occur in Australia.

Radula retroflexa Taylor, London Journal of Botany 5: 378 (1846)

Original material: Hab. Pacific Isles. Nightingale, Hook. Herb.

Radula robinsonii Steph., Species Hepaticarum 4: 216 (1910)

Original material: Australia, Norfolk Island, Robinson.

Radula sainsburyana E.A.Hodgs. & Allison, Transactions and Proceedings of the Royal Society of New Zealand 74: 279 (1944)

Original material: The habitat seems to have been on rock; locality, creek-bed, Mt. Ruapehu, coll. G. O. K. Sainsbury. A duplicate of the type is in the Herbarium of the Plant Research Bureau, Wellington.

#Radula scariosa Mitt., Bonplandia 9: 367 (1861)

Original material: Seemann, inter No. 837.

Recorded for Australia on the basis of the mistaken view that *Radula multiamentula* is a synonym of *Radula scariosa*. It is not, and *Radula scariosa* does not occur in Australia.

Radula sect. *Plagiochila* Dumort., Sylloge Jungermannidearum Europae indigenarum: 42 (1831) ≡ **Plagiochila** (Dumort.) Dumort.

Radula sect. *Scapania* Dumort., Sylloge Jungermannidearum Europae indigenarum: 38 (1831) ≡ **Scapania** (Dumort.) Dumort.

Radula sharpii K.Yamada, Journal of Japanese Botany 60: 360 (1985)

Radula sharpii was reported for Australia based on misidentifications of *Radula oreopsis*.

Radula squarrosa K.Yamada, Journal of Japanese Botany 65: 1 (1990)

Original material: Queensland: Ballenden Ker, Montane rain forest, on bark of trees, 3 Sep. 1986, *G.A.M. Scott 131* (holo: MUCV; iso: NICH, TNS).

Radula strangulata Hook.f. & Taylor, London Journal of Botany 5: 377 (1846)

Original material: Hab. New Zealand. Dr. J.D. Hooker. 1840.

Radula subg. *Cladoradula* Spruce, Transactions and Proceedings of the Botanical Society of Edinburgh 15: 315 (1885) ≡ **Cladoradula** (Spruce) M.A.M.Renner, Gradst., Ilk.-Borg. & F.R.Oliveira-da-Silva

#Radula tabularis Steph., Hedwigia 23: 131 (1884)

Original material: Hab Promontorium bonae spei, in monte Tabulari leg. Drege. Ecklon. (Herb. Mus. bot Lips.) (Herb. Jack.).

Reports of *Radula tabularis* for Australia (and New Zealand) are based on misidentifications of *Radula ratkowskyana* and *Radula tasmanica*.

Radula tasmanica Steph., Species Hepaticarum 4: 212 (1910)

Original material: Hab. Tasmania.

Radula thiersiae K.Yamada, Journal of the Hattori Botanical Laboratory 62: 198 (1987)

Original material: Queensland: Cook District: Bellenden Ker National Park, summit of central peak of Mt Bellenden Ker, vicinity of Telecom Transmitting Station, 1500 m alt., 10 Jul. 1984, *B.M. Thiers & R.E. Halling 2500* (holo: NY; iso: AD, NICH).

Radula tonitrua Pócs & M.A.M.Renner, Telopea 24: 197 (2021)

Original material: Queensland: Paluma Range State Forest, 1.5 km NW of Paluma settlement, Birthday Creek, in the experimental area of James Cook University Tropical Biology Department, on *Abrodictyum obscurum* filmy fern leaves in wet, notophyll vine forest among boulders near the streamlet, at 840–870 m elevation, 18°59′9″S, 146°10′7–8″E, 20 Jun. 2001, *S. Pócs & T. Pócs 01121/AW, A. Cairns, E.A. Brown & Ch. Cargill* (holo: EGR, including 2 portions mounted on microslides; iso: BRI, CANB).

Radula ventricosa Steph., Species Hepaticarum 4: 187 (1910)

Original material: Hab. Nova Guinea

Radula ventricosa does not occur in Australia.

Radula wattsiana Steph., Species Hepaticarum 4: 211 (1910) = **Radula buccinifera** (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees

Original material: Hab. Australia, New South Wales; Tasmania.

Radula weymouthiana Steph., Species Hepaticarum 4: 190 (1910)

Original material: Hab. Tasmania.

Reboulia Raddi, Opuscoli Scientifici 2(6): 357 (1818), *nom. cons.*

Reboulia hemisphaerica (L.) Raddi, Opuscoli Scientifici 2(6): 357 (1818)

Basionym: *Marchantia hemisphaerica* L.

This species may be present in Australia, confirmation by genetic data or chromosome count is required.

Reboulia queenslandica (Steph.) M.L.Hicks, Journal of the Hattori Botanical Laboratory 71: 114 (1992)

Basionym: *Plagiochasma queenslandicum* Steph.

Rectolejeunea A.Evans, Bulletin of the Torrey Botanical Club 33: 9 (1906) = **Lejeunea** Lib.

Rectolejeunea ocellata Herzog, Transactions and Proceedings of the Royal Society of New Zealand 77: 255 (1949) ≡ **Cumulolejeunea ocellata** (Herzog) R.L.Zhu & L.Shu

Original material: New Zealand: North Island: Hawke's Bay Land District, Morere Bush near Wairoa, on bark, 21 Jan. 1934, Hodgson 293.

Rectolejeunea queenslandica (B.M.Thiers) X.-L.He, Annales Botanici Fennici 34: 129 (1997) ≡ **Lepidolejeunea queenslandica** B.M.Thiers

Basionym: *Lepidolejeunea queenslandica* B.M.Thiers

Rectolejeunea richmondensis Steph., Species Hepaticarum 5: 701 (1914) = **Lejeunea cuspidistipula** (Steph.) Steph.

Original material: Hab. Australia, New South Wales.

Riccardia Gray, A Natural Arrangement of British Plants 1: 679, 683 (1821), *nom. cons.*

Riccardia aequicellularis (Steph.) Hewson, Proceedings of the Linnean Society of New South Wales 95: 79 (1970)

Basionym: *Aneura aequicellularis* Steph.

Riccardia alba (Colenso) E.A.Br., Journal of the Hattori Botanical Laboratory 66: 66 (1989)

Basionym: *Aneura alba* Colenso

Riccardia alcicornis (Hook.f. & Taylor) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 431 (1877)

Basionym: *Jungermannia alcicornis* Hook.f. & Taylor

Riccardia australis (Lehm.) Hewson, Proceedings of the Linnean Society of New South Wales 95: 110 (1970)

Basionym: *Sarcomitrium australe* Lehm.

The protologue of *Sarcomitrium australe* identifies Priess as the gatherer of the original material. Priess is known to have visited Western Australia, but did not collect in New Zealand. Hewson (1970b) reported *Riccardia australis* from Western Australia and New Zealand and stated that it was unusual the species was unknown from suitable habitats between, in Tasmania and Victoria. Catcheside suggested that the specimen was associated with *Echinodium* and *Plagiochila banksiana*, which indicated an origin in New Zealand, and was therefore misattributed to Western Australia (see discussion in Brown & Braggins 1989). We have not seen original material, and reserve judgement regarding its geographic origins, pending further investigation. Brown & Braggins (1989) did see the lectotype (designated by Hewson 1970b as 'holotype'), and we follow the circumscription of *Riccardia australis* presented, as *Riccardia exilis*, by Brown & Braggins (1989), here with reservation. The circumscription and distribution of *Riccardia australis* warrants further investigation.

Riccardia babindae Hewson, Proceedings of the Linnean Society of New South Wales 95: 85 (1970)

Original material: Queensland: The Boulders, Babinda, Aug. 1964, *H. Hewson 460* (holo: NSW; iso: BRI).

Riccardia bipinnatifida (Colenso) Hewson, Proceedings of the Linnean Society of New South Wales 95: 93 (1970)

Basionym: *Aneura bipinnatifida* Colenso

Riccardia bliklika Hewson, Proceedings of the Linnean Society of New South Wales 95: 83 (1970)

Original material: Queensland: Vision Falls, Lake Eacham, Atherton Tableland, on weathering basalt in rainforest, Aug. 1964, *H. Hewson 387* (holo: NSW; iso: BRI).

Riccardia browniae A.Hagborg & L.Söderstr., Lindbergia 45(01152): 1 (2022)

Basionym: *Aneura pusilla* Steph.

Riccardia cochleata (Hook.f. & Taylor) Kuntze, Revisio Generum Plantarum 2: 838 (1891)

Basionym: *Riccia cochleata* Hook.f. & Taylor

Riccardia colensoi (Steph.) W.Martin, Transactions and Proceedings of the Royal Society of New Zealand 78: 499 (1950)

Basionym: *Aneura colensoi* Steph.

Riccardia crassa (Schwägr.) C.Massal., Nuovo Giornale Botanico Italiano 17(3): 254. 1885.

Basionym: *Jungermannia crassa* Schwägr.

Riccardia crassa (Schwägr.) Carrington & Pearson, Proceedings of the Linnean Society of New South Wales, Series 2 2: 1056 (1888), *nom. illeg.* ≡ **Riccardia crassa** (Schwägr.) Carrington & Pearson

Basionym: *Jungermannia crassa* Schwägr.

Riccardia eriocaula (Hook.) Besch. & C.Massal., Mission Scientifique de Cap Horn 5, Botanique 5: 244 (1889)

Basionym: *Jungermannia eriocaula* Hook.

Riccardia exilis E.A.Br., Journal of the Hattori Botanical Laboratory 66: 107 (1989), *nom. illeg.*

Replaced synonym: Sarcomitrium australe Lehm.

Riccardia exilis E.A.Br. nom. nov. is superfluous, because *Riccardia australis* (Lehm.) Hewson, a name that should have been adopted, was listed as a synonym of *R. exilis* when published.

Riccardia gracilis (Steph.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 295 (1963)

Basionym: *Aneura gracilis* Steph.

Riccardia graeffei (Steph.) Hewson, Proceedings of the Linnean Society of New South Wales 95: 118 (1970)

Basionym: *Aneura graeffei* Steph.

Riccardia hypipamensis Hewson, Proceedings of the Linnean Society of New South Wales 95: 97 (1970)

Original material: Queensland: The Crater, Mt Hypipamee, on weathering basalt in rainforest, Aug. 1964, *H. Hewson 448* (holo: NSW; iso: SYD).

Riccardia lobulata (Colenso) E.A.Hodgs., Transactions of the Royal Society of New Zealand. Botany 3(4): 92 (1965)

Basionym: *Zoopsis lobulata* Colenso

Riccardia longiflora (Steph.) Hewson, Proceedings of the Linnean Society of New South Wales 95: 88 (1970)

Basionym: *Aneura longiflora* Steph.

Riccardia macdonaldiana Hewson, Proceedings of the Linnean Society of New South Wales 95: 93 (1970)

Original material: Queensland: Mossman Gorge, 3/4 mile beyond Mosman Mission, on soil and roots in rainforest, Aug. 1964, *H. Hewson 326* (holo: NSW; iso: BRI).

Riccardia marginata (Colenso) Pearson, University of California Publications in Botany 10: 309 (1923)

Basionym: *Aneura marginata* Colenso

Riccardia maxima Schiffn., Denkschriften der Kaiserlichen Akademie der Wissenschaften, Mathematisch-Naturwissenschaftliche Klasse 67: 177 (1898) ≡ **Aneura maxima** (Schiffn.) Steph.

Original material: *Java: Prov. Preanger. In decliv. austral. montis Pangerango; in silvis primaevis supra Tjibodas ad truncos putrides. Regio nubium, alt. 1545 m s. m. — 24. 4. 1894. (No. 239.). Ibidem: Alt. 1600?;/ s. m. — 21.4. 1894. (No. 240.). *Java: Prov. Preanger. In decliv. austral. montis Pangerango; in silvis primaevis supra locum dictum. »Tjiburrum« ad truncos putrides. Regio nubium, alt. 1715 m s. m. — 2. 5. 1894 (c. fr.). (No. 241.). Java: Prov. Preanger. In silvis primaevis secus viam ad locum dictum »Tjiburrum« prope Tjibodas ad truncos putrides. Regio nubium, alt. 1460«/ s. m. — 28. 4. 1894. (No. 242.). Sumatra occid.: In monte Singalang; in silvis primaevis ad latus austro-orient, ad saxa. Regio nubium, alt. 2120''' s. m. — 25. 7. 1894. (No. 243.). *Ibidem: Ad truncos putrides. Alt. 2400 w s. m. — 25. 7. 1894 (c. fr.). (No. 244.).

Riccardia minima Carrington & Pearson, Proceedings of the Linnean Society of New South Wales, Series 2 2: 1055 (1888) = **Riccardia lobulata** (Colenso) E.A.Hodgs.

Original material: Hab. — On the surface of peat, in bogs, Coogee Bay, N.S.W., May, 1885.

Riccardia multifida (L.) Gray, A Natural Arrangement of British Plants 1: 684 (1821)

Basionym: *Jungermannia multifida* L.

There are no records of this European taxon in Australia.

Riccardia muscoides (Colenso) E.A.Hodgs., Records of the Dominion Museum 4: 130 (1962) = **Riccardia marginata** (Colenso) Pearson

Basionym: *Aneura muscoides* Colenso

Riccardia nitida (Colenso) E.A.Hodgs., Transactions of the Royal Society of New Zealand. Botany 3(4): 92 (1965)

Basionym: *Aneura nitida* Colenso

Riccardia prehensilis (Hook.f. & Taylor) C.Massal., Nuovo Giornale Botanico Italiano 17: 255 (1885)

Basionym: *Jungermannia prehensilis* Hook.f. & Taylor

Riccardia pusilla (Steph.) E.A.Br., Journal of the Hattori Botanical Laboratory 66: 82 (1989), *nom. illeg.* = **Riccardia browniae** A.Hagborg & L.Söderstr.

Basionym: *Aneura pusilla* Steph.

Riccardia reducta R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 294 (1963) = **Riccardia aequicellularis** (Steph.) Hewson

Original material: Tasmania: Mt Arrowsmith, 1962, *R.M. Schuster 50379a* (hb. Schuster).

Riccardia rupicola (Steph.) Hewson, Proceedings of the Linnean Society of New South Wales 95: 99 (1970)

Basionym: *Aneura rupicola* Steph.

Riccardia stolonifera (Steph.) E.A.Hodgs., Records of the Dominion Museum 4: 130 (1962) = **Riccardia crassa** (Schwägr.) Carrington & Pearson

Basionym: *Aneura stolonifera* Steph.

Riccardia subg. *Lobatiriccardia* Mizut. & S.Hatt., Journal of the Hattori Botanical Laboratory 18: 38 (1957) ≡ **Lobatiriccardia** (Mizut. & S.Hatt.) Furuki

Riccardia wattsiana (Steph.) Hewson, Proceedings of the Linnean Society of New South Wales 95: 91 (1970)

Basionym: *Aneura wattsiana* Steph.

Riccia L., Species Plantarum 2: 1138 (1753), *nom. cons.*

Riccia acutisulca Steph., Species Hepaticarum 6: 1 (1917)

Original material: Hab. Australia. (Goebel legit.).

Riccia abdita Cargill, Australian Systematic Botany 34: 340 (2021)

Original material: Northern Territory: Fish River Station, under rock ledge on damp algal mat over soil, surrounded by spinifex, 29 Apr. 2012, *D.C. Cargill 1298* (holo: CANB 811430).

Riccia albida Sull., Proceedings of the Academy of Natural Sciences of Philadelphia 21: 231 (1869)

Original material: FH (lectotype); PC (isolectotype)

Riccia areolata Na-Thalang, Brunonia 3: 78 (1980)

Original material: New South Wales: Prospect Reservoir, 15 Jun. 1967, *O. Na-Thalang 236* (holo: NSW 251875).

Riccia asprella Carrington & Pearson, Proceedings of the Linnean Society of New South Wales, Series 2 2: 1059 (1888)

Original material: New South Wales: Head of Double Bay, Jul. 1885, *T. Whitelegge 53* (lecto: NSW [no longer extant]; isolecto: BM, possible isolecto: SYD).

Riccia atropurpurea Sim. Transactions of the Royal Society of South Africa 15: 11 (1926)

Riccia bifurca Hoffm., Deutschlands Flora oder Botanisches Taschenbuch 2: 95 (1796)

Original material: MW (holotype)

In Australia the name *R. bifurca* has been misapplied to *R. subbifurca*.

Riccia billardierei Mont. & Nees, Synopsis Hepaticarum 4: 602 (1846)

Original material: Indonesia. Java insula, s.dat. J.J.H. de Labillardiere 237 (STR); PC (isolectotype)

Riccia blackii Na-Thalang, Brunonia 3: 81 (1980)

Riccia bullosa var. *vesiculosa* Carrington & Pearson, Proceedings of the Linnean Society of New South Wales, Series 2 2: 1058 (1888) ≡ **Riccia vesiculosa** (Carrington & Pearson) Steph.

Riccia burnettensis Steph., Bulletin de l'Herbier Boissier 6: 370 (1898) = **Riccia multifida** var. **multifida**

Riccia cancellata Taylor, London Journal of Botany 5: 414 (1846)

Original material: Swan River. 1843, *J. Drummond s.n.* (FH).

Riccia caroliniana Na-Thalang, Brunonia 3: 72 (1980)

Original material: Cultivated. New South Wales, University of Sydney, 19 Sep. 1969 (grown from live material collected from Robin Falls, Northern Territory), *O. Na-Thalang 288*.

Riccia cartilaginosa Steph., Hedwigia 28: 272 (1889)

Riccia cavernosa Hoffm., Deutschlands Flora oder Botanisches Taschenbuch 2: 95 (1796)

Original material: Holotype: Germany. In terra limosa, ad piscinas. (type not extant).

Riccia chrysocrinita Cargill, Australian Systematic Botany 34: 345 (2021)

Original material: Cultivated. New south Wales: University of Sydney, 14 June 1969 (grown from live material collected from c. 325+ miles Stuart Highway, Northern Territory), *O.Na-Thalang 312* (holo: SYD; iso: CANB 914650).

Riccia cincta Jovet-Ast, Cryptogamie - Bryologie Lichenologie 21: 303 (2000)

Original material: Western Australia: 17 km S of Meekatharra, 1 Apr. 1979, *O.H. Volk 075* (holo: PC).

Riccia cochleata Hook.f. & Taylor, London Journal of Botany 4: 96 (1845) ≡ **Riccardia cochleata** (Hook.f. & Taylor) Kuntze

Original material: Hab. Lord Auckland's Group.

Riccia collata Na-Thalang, Brunonia 3: 122 (1980)

Original material: New South Wales: Tunmallallee [Timmallallie], 26 Nov. 1967, *O. Na-Thalang 220* (holo: NSW; iso: SYD).

Riccia coriandrina Spreng., Anleitung zur Kenntniss der Gewächse 3: 320 (1804) ≡ **Corsinia coriandrina** (Spreng.) Lindb.

Riccia corrugata Jovet-Ast, Cryptogamie - Bryologie 21: 308 (2000)

Original material: Northern Territory: Alice Springs, 7 May 1979, *O.H. Volk 140* (holo: PC).

Riccia crassa Steph., Bulletin de l'Herbier Boissier 6: 376 (1898)

Riccia crassivenia Jovet-Ast, Cryptogamie - Bryologie Lichenologie 21: 312 (2000)

Original material: Northern Territory: Caravan park, Katherine, 19 Apr. 1979, *O.H. Volk 111* (holo: PC; iso: CANB).

Riccia crinita Taylor, London Journal of Botany 5: 415 (1846)

Riccia crozalsii Levier, Revue Bryologique 29: 73 (1902)

Original material: France: Herault, prope Roquehaute (Agde), Mar. 1902, *Crozals* (?FI).

Riccia crustata Trab. ex Grolle, Lindbergia 3: 54 (1975)

Original material: Algeria. Tiaret, leg. Trabut (MPU).

Riccia crystallina L., Species Plantarum 2: 1138 (1753)

Original material: Micheli, P.A. 1729. Nova plantarum genera, tab. 57, fig. 3, lectotype. Riccia 0:2.n:1 (FI, typo).

Riccia deserticola Steph., Bulletin de l'Herbier Boissier 6: 373 (1898)

Original material: South Australia: Arco-Eillinna Well [=Arcoeillinna Well]. found at base of rocks, Elder Exploration Expedition, 27 May 1891, *R. Helms s.n.* (G 00064232).

#Riccia discolor Lehm. & Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 4: 1 (1832)

Original material: Nepal. (S-PA, W).

Whether *Riccia discolor* occurs in Australia requires further investigation, see Cargill et al. (2021). Until the presence of *Riccia discolor* in Australia is definitively proven, we treat the species as absent from Australia.

Riccia duplex Lorb. ex Mull.Frib., Hedwigia 80: 100 (1941)

Original material: Holotype: Germany. Baden, Mooswald bei Freiburg; in einem Wassergraben, 1929. Lorbeer s.n. (?herbarium).

Riccia duplex var. **megaspora** Na-Thalang, Brunonia 3: 128 (1980)

Original material: Northern Territory: East Alligator River, 15 May 1968, *R.C. Carolin 6880* (holo: NSW; iso: SYD).

Riccia eburnea Jovet-Ast, Cryptogamie - Bryologie Lichenologie 21: 300-301, pl. 1-3, 14 (2000)

Original material: Northern Territory: Mont Olga, Valley of the Winds, 24 Jul. 1983, *A. Schafer-Verwimp 4628a* (holo: PC).

Riccia epecenia Cargill, Bryophyte Diversity and Evolution 45: 86 (2022)

Original material: New South Wales: Gum Ridge Fire Trail West, Mt Canobolas State Conservation Area (SCA), 1244 m, 33º21'S, 148º57'E, 20 May 2022, *D.C. Cargill 1702* (holo: CANB).

Riccia fluitans L., Species Plantarum 2: 1138 (1753)

Riccia gangetica Ahmad, Current Science 11: 433 (1942)

Original material: India: Uttar Pradesh. Lucknow, Unao et Aligardh, Aug. 1940, *S. Ahmad s.n.* (LWU).

Riccia inflexa Taylor, London Journal of Botany 5: 417 (1846)

Original material: Swan River. 1843. *J. Drummond s.sn.* (FH).

Riccia junghuhniana Nees & Lindenb., Synopsis Hepaticarum 4: 609 (1846)

Original material: In Java Insula. *Junghuhn s.n.* (STR).

Riccia lamellosa Raddi, Opuscoli Scientifici 2(6): 351 (1818)

Riccia lata Taylor, London Journal of Botany 5: 416 (1846)

Original material: Swan River. 1843. *J. Drummond s.n.* (FH).

#Riccia limbata Bisch., Synopsis Hepaticarum 4: 606 (1846)

In Australia the name *Riccia limbata* has been misapplied to *Riccia inflexa*. *Riccia limbata* does not occur in Australia.

Riccia longiciliata Na-Thalang, Brunonia 3: 75 (1980) = **Riccia crinita** Taylor

Original material: Northern Territory: Palm Valley, 15 Aug. 1966, *O. Na-Thalang 100A* (holo: NSW).

Riccia luticola Na-Thalang, Brunonia 3: 123 (1980)

Original material: Northern Territory: c. 5 miles south of Katherine, *O. Na-Thalang 321* (holo: NSW).

Riccia macrospora Steph., Bulletin de l'Herbier Boissier 6: 328 (1898)

Riccia marginata Carrington & Pearson, Proceedings of the Linnean Society of New South Wales, Series 2 2: 1056 (1888), *nom. illeg.* = **Riccia cartilaginosa** Steph.

Original material: New South Wales: Parramatta, Aug. 1885, *T. Whitelegge 48*.

Riccia multifida (Steph.) Steph., Bulletin de l'Herbier Boissier 6: 365 (1898) = **Riccia multifida** (Steph.) Steph.

Basionym: *Ricciella multifida* Steph.

Riccia multifida var. *divaricata* Na-Thalang, Brunonia 3: 133 (1980) = **Riccia duplex** var. **megaspora** Na-Thalang

Original material: Northern Territory: South Alligator River, 29 Jan. 1969, *O. Na-Thalang 324*.

Riccia multifida var. **filiformis** Na-Thalang, Brunonia 3: 131 (1980)

Original material: New South Wales: Coonabarabran, Mallallee Creek, 26 Mar. 1967, *O. Na-Thalang 215* (holo: NSW 251934; iso: SYD).

Riccia multifida var. **torticolla** Na-Thalang, Brunonia 3: 134 (1980)

Original material: Western Australia: Poison Creek, 50 [80 km] miles north of Leonora, Aug. 1966, *R.C. Carolin 5834* (holo: NSW 251936).

Riccia muscicola Steph., Hedwigia 24: 4 (1885)

Riccia natans L., Systema Naturae Edn. 10, 2: 1339 (1759) ≡ **Ricciocarpos natans** (L.) Corda

Riccia nigrella DC., Flore Francaise Edn. 3 reissued, 6: 193–194 (1815)

Riccia obchantiana Cargill, Australian Systematic Botany 34(4): 358 (2021)

Original material: Cultivated. New South Wales: University of Sydney, 23 Jul. 1969 (grown from live material collected from ca. 380 mi. Stuart Hwy, on dry creek, under tree shade, 4 Feb. 1969, *O. Na-Thalang 315* (holo: SYD).

Riccia olgensis Na-Thalang, Brunonia 3: 100 (1980)

Original material: Northern Territory: Central South: on top of Mt Olga, along creek bank, 20 Aug. 1966, *O. Na-Thalang 135* (holo: NSW 251937).

Riccia papulosa (Steph.) Steph., Bulletin de l'Herbier Boissier 6: 377 (1898)

Basionym: *Ricciella papulosa* Steph.

Riccia papulosa var. **variabilis** Na-Thalang, Brunonia 3: 112 (1980)

Original material: Northern Territory: south of Darwin, c. 150 miles on Stuart Highway, 29 Jan. 1969, *O. Na-Thalang 300* (holo: SYD (specimen no longer extant except for 3 microscope slides of spores)).

Riccia perthiana Steph. ex K.I.Goebel, Organographie der Pflanzen, ed. 2 2(1): 630, f. 583 (1915)

Riccia plana Taylor, London Journal of Botany 5: 414 (1846) = **Riccia crystallina** L.

Original material: Swan River. 1843. *J. Drummond s.n.*

Riccia porosa Taylor, London Journal of Botany 5: 416 (1846)

Original material: Swan River. *J. Drummond s.n.*

Riccia pullulans Jovet-Ast, Cryptogamie - Bryologie Lichenologie 18: 183 (1997)

Original material: Western Australia: The Humps, near Hyden, 23 Mar. 1979, *O.H. Volk 071* (holo: PC).

Riccia punctata Taylor, London Journal of Botany 5: 416 (1846) = **Riccia inflexa** Taylor

Original material: Swan River. *J. Drummond s.n.*

Riccia rorida Na-Thalang, Brunonia 3: 101 (1980)

Original material: Australian Capital Territory: Cotter River, 27 Jan. 1967, *O. Na-Thalang 191.*

Riccia rubrispora Steph., Bulletin de l'Herbier Boissier 6: 332 (1898)

Original material: Askariaga [=Arkaringa Creek], Elder Exploring Expedition, 15 May 1891, *R. Helms s.n.* (lecto: G 00052610).

Riccia sellingii S.W.Arnell, Botaniska Notiser 115: 311 (1962)

Original material: Northern Territory: (Central Australia): MacDonnell Ranges, bank of the Finke River at mouth of Cycas Gorge, 3 Apr. 1949, *O.H. Selling s.n.*.

Synonymised under *Riccia macrospora* but is distinct from that species. see Cargill & Beckmann (2020). Based on spores described by Arnell it may be *R. rubrispora*.

Riccia singularis Jovet-Ast, Cryptogamie - Bryologie Lichenologie 17: 127 (1996)

Original material: Western Australia: Newmanns Rocks [Newman Rock, Eyre Highway, 75 km W of Balladonia], 140 km E of Norseman, *O.H. Volk 61* (holo: PC; iso: CANB 871868).

Riccia sorocarpa Bisch., Nova Acta Physico-medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum Exhibentia Ephemerides sive Observationes Historias et Experimenta 17: 1053 (1835)

Riccia spongiosula Na-Thalang, Brunonia 3: 113 (1980)

Original material: New South Wales: nr Jubbul [Tubbul], Young, 22 Jul. 1903, *W.W. Watts 744* (holo: NSW; iso: SYD).

Riccia subbifurca Warnst. ex Croz., Revue Bryologique 30: 62 (1903)

Original material: France: La Roche l'Abeille, Haute Vienne, 17 Mar. 1902, *G. Lachenaud s.n.*

Riccia tasmanica Steph. ex Rodway, Tasmanian Bryophyta 2: 4 (1916)

Riccia verrucosa Cargill, Australian Systematic Botany 34: 360-361 (2021)

Original material: Northern Territory: Fish River Station, under shrub on sticky algal mat over silty/sandy soil, *D.C. Cargill 1277, p.p.* (holo: CANB 811408).

Riccia vesiculosa (Carrington & Pearson) Steph., Bulletin de l'Herbier Boissier 6: 375 (1898)

Basionym: *Riccia bullosa* var. *vesiculosa* Carrington & Pearson

Riccia victoriensis Steph., Bulletin de l'Herbier Boissier 6: 370 (1898)

Original material: Hab. Australia, Victoria, Melbourne (Herb. Kew, sub nomine «R. plana ?Taylor » leg. F. M. A. 1854. No 506).

Riccia weymouthiana Steph. ex Rodway, Tasmanian Bryophyta 2: 5 (1916)

Original material: Lindisfarne, Mt Abrupt.

Ricciella multifida Steph., Hedwigia 28: 273 (1889) ≡ **Riccia multifida** (Steph.) Steph.

Ricciella multilamellata Steph., Hedwigia 28: 273 (1889) = **Riccia cavernosa** Hoffm.

Ricciella papulosa Steph., Hedwigia 28: 273 (1889) ≡ **Riccia papulosa** (Steph.) Steph.

Ricciocarpos Corda, Naturalientausch 12: 651 (1829)

Ricciocarpos natans (L.) Corda, Naturalientausch 12: 651 (1829)

Basionym: *Riccia natans* L.

Riella Mont., Annales des Sciences Naturelles; Botanique ser. 3, 18: 11 (1852)

Riella halophila Banwell, Transactions of the British Bryological Society 1: 475 (1951)

Original material: Victoria: Port Phillip, Point Lonsdale. Sept. 1949, *E.I. McLennan s.n.* (holo: MEL 0059264).

Riella spiculata J.Taylor, Kew Bulletin 9: 45 (1954)

Original material: Victoria: Portland, Etterick, Darlots Creek Sanctuary, 15 Oct. 1952, *R. Melville 1677* (holo: BM; iso: MEL1046615A).

Saccogynidium Grolle, Journal of the Hattori Botanical Laboratory 23: 43 (1960)

Saccogynidium decurvum (Mitt.) Grolle, Journal of the Hattori Botanical Laboratory 23: 43 (1960)

Basionym: *Lophocolea decurva* Mitt.

Saccogynidium muricellum (De Not.) Grolle, Journal of the Hattori Botanical Laboratory 36: 80 (1972)

Basionym: *Chiloscyphus muricellus* De Not.

Sarcomitrium alcicorne (Hook.f. & Taylor) Mitt., Flora Tasmaniae 2: 240 (1860) ≡ **Riccardia alcicornis** (Hook.f. & Taylor) Trevis.

Basionym: *Jungermannia alcicornis* Hook.f. & Taylor

Sarcomitrium australe Lehm., Novarum et Minus Cognitarum Stirpium Pugillus 10: 19 (1857) ≡ **Riccardia australis** (Lehm.) Hewson

Original material: In Nova Hollandia ad flumen Cygnorum colligit Cl. Dr. L. Preiss.

Sarcomitrium cochleatum (Hook.f. & Taylor) Kuntze, Flora Tasmaniae 2: 240 (1860) ≡ **Riccardia cochleata** (Hook.f. & Taylor) Kuntze

Basionym: *Riccia cochleata* Hook.f. & Taylor

Sarcomitrium crassum (Schwägr.) Mitt., Flora Novae Zealandiae 2: 167 (1855) ≡ **Riccardia crassa** (Schwägr.) Carrington & Pearson

Basionym: *Jungermannia crassa* Schwägr.

Sarcoscyphus sparsifolium Lindb., Notiser ur Sallskapets pro Fauna et Flora Fennica Forhandlingar 9: 280 (1868) ≡ **Marsupella sparsifolia** (Lindb.) Dumort.

Original material: Hab. in saxis rivuli ad opp. Kongsberg Norvegiae ubi Junii 1864 detexit oculat. amicus P. T. Cleve.

Scapania (Dumort.) Dumort., Recueil d'Observations sur les Jungermanniacees: 14 (1835), *nom. cons.*

Basionym: *Radula* sect. *Scapania* Dumort.

Scapania ampliata Steph., Bulletin de l'Herbier Boissier 5: 106 (1897)

Original material: Tosa, Hayachine, Faurie 12866.

Scapania ampliata subsp. **queenslandica** M.L.Hicks, Journal of the Hattori Botanical Laboratory 69: 130 (1991)

Original material: Queensland: Windson Tableland, over rocks along Spencer Creek, Sep. 1982, *M.L. Hicks 11182* (holo: BRI).

Scapania surculosa Nees, Synopsis Hepaticarum 1: 62 (1844) ≡ **Acrobolbus surculosus** (Nees) Trevis.

Original material: In Nova Hollandia (Sieber in herb. N; Frazer in herb. L).

Scapania vertebralis Gottsche, Synopsis Hepaticarum 1: 72 (1844) ≡ **Blepharidophyllum vertebrale** (Gottsche) Angstr. ex C.Massal.

Original material: Habitat in Insula van Diemen (Greville in hb. G).

Schiffneriolejeunea Verd., Annales Bryologici 6: 88 (1933)

#Schiffneriolejeunea cumingiana (Mont.) Gradst., Journal of the Hattori Botanical Laboratory 38: 333 (1974)

Basionym: *Phragmicoma cumingiana* Mont.

Schiffneriolejeunea cumingiana does not occur in Australia.

Schiffneriolejeunea pulopenangensis (Gottsche) Gradst., Journal of the Hattori Botanical Laboratory 38: 335 (1974)

Basionym: *Phragmicoma pulopenangensis* Gottsche

Schiffneriolejeunea tumida (Nees) Gradst., Journal of the Hattori Botanical Laboratory 38: 335 (1974)

Basionym: *Ptychanthus tumidus* Nees

Schiffneriolejeunea tumida var. **hasskarliana** (Gottsche) Gradst. & Terken, Occasional Papers of the Farlow Herbarium of Cryptogamic Botany 16: 77 (1981)

Basionym: *Phragmicoma hasskarliana* Gottsche

Schisma alpinum Steph., Species Hepaticarum 4: 20 (1909) = **Herbertus oldfieldianus** (Steph.) Rodway

Original material: Hab. Nova Zelandia, in alpinis.

Schisma oldfieldianum Steph., Species Hepaticarum 4: 20 (1909) ≡ **Herbertus oldfieldianus** (Steph.) Rodway

Original material: Hab. Tasmania.

Schistochila Dumort., Recueil d'Observations sur les Jungermanniacees: 15 (1835)

Schistochila aligera (Nees & Blume) J.B.Jack & Steph., Hedwigia 31: 12 (1892) ≡ **Gottschea aligera** (Nees & Blume) Nees

Basionym: *Jungermannia aligera* Nees & Blume

Schistochila altissima E.A.Hodgs., Transactions of the Royal Society of New Zealand, Botany 3: 85 (1965) ≡ **Pachyschistochila altissima** (E.A.Hodgs.) R.M.Schust. & J.J.Engel

Schistochila baileyana Steph., Species Hepaticarum 4: 85 (1909)

Original material: Hab. Australia, Queensland.

Schistochila balfouriana (Hook.f. & Taylor) Steph., Species Hepaticarum 4: 91 (1909)

Basionym: *Jungermannia balfouriana* Hook.f. & Taylor

Schistochila brotheri Steph., Species Hepaticarum 4: 85 (1909) ≡ **Gottschea brotheri** (Steph.) Grolle & Zijlistra

Original material: Hab. Australia, New South Wales.

#Schistochila ciliata (Mitt.) Steph., Species Hepaticarum 4: 87 (1909)

Basionym: *Gottschea ciliata* Mitt.

The record of *Schistochila ciliata* for Australia by Meagher (2010b, 2011b) was based on a plant whose cilia do not have the thickened walls and narrow cell lumen characteristic of *S. ciliata*, instead the plant has cilia typical of *S. pseudociliata*. *Schistochila ciliata* does not occur in Australia.

Schistochila cristata Steph., Hedwigia 28: 274 (1889)

Original material: Hab. Bellender Ker Range 5000' leg. Sayer and Davidson 1887

Schistochila fragilis Steph., Species Hepaticarum 4: 84 (1909) = **Gottschea tuloides** (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

Original material: Hab. Tasmania.

Schistochila heterodonta (Colenso) Steph., Species Hepaticarum 4: 88 (1909) = **Schistochila repleta** (Hook.f. & Taylor) Steph.

Basionym: *Gottschea heterodonta* Colenso

Schistochila isotachyphylla (J.J.Engel & R.M.Schust.) Xiao L.He & Glenny, Australian Systematic Botany 23(4): 237 (2010) ≡ **Gottschea isotachyphylla** (J.J.Engel & R.M.Schust.) J.J.Engel

Basionym: *Paraschistochila isotachyphylla* J.J.Engel & R.M.Schust.

Schistochila lacerata Steph., Species Hepaticarum 6: 492 (1924) ≡ **Gottschea lacerata** (Steph.) Grolle & Zijlistra

Original material: Hab. Nova Guinea (Kaulfuss legit).

Often accepted as *Schistochila*, for consistency within this checklist placed in *Gottschea*.

Schistochila lehmanniana (Lindenb.) Carrington & Pearson, Papers and Proceedings of the Royal Society of Tasmania 1887: 51 (1888)

Basionym: *Jungermannia lehmanniana* Lehm. & Lindenb.

Schistochila parvistipula Rodway, Papers and Proceedings of the Royal Society of Tasmania 1916: 47 (1916) ≡ **Pachyschistochila parvistipula** (Rodway) R.M.Schust. & J.J.Engel

Original material: Cradle Mt.

Schistochila philippinensis (Nees & Mont.) Steph., Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie 23: 308. 1896 ≡ **Gottschea philippinensis** Mont.

Basionym: *Gottschea philippinensis* Mont.

Schistochila philippinensis (Mont.) J.B.Jack & Steph., Botanisches Centralblatt 60: 98 (1894), *nom. illeg.* ≡ **Gottschea philippinensis** Mont.

Basionym: *Gottschea philippinensis* Mont.

Schistochila pinnatifolia (Hook.) Trevis., Memorie del Reale Istituto Lombardo de Scienze e Lettere. Serie 3, Classe di Scienze Matematiche e Naturali 4: 392 (1877) ≡ **Gottschea pinnatifolia** (Hook.) Nees

Basionym: *Jungermannia pinnatifolia* Hook.

Schistochila pseudociliata R.M.Schust., Bulletin of the National Science Museum, Tokyo 14: 623 (1971)

Original material: New Zealand: Stewart Island, Tin Range, N of Port Pegasus, near crest, SW end of range, ca. 1200–1500 ft, 13 Jan. 1962, *R.M. Schuster 53133a*.

#Schistochila repleta (Hook.f. & Taylor) Steph., Species Hepaticarum 4: 90 (1909)

Basionym: *Jungermannia repleta* Hook.f. & Taylor

Schistochila repleta is endemic to New Zealand.

Schistochila spinosa Steph., Species Hepaticarum 6: 495 (1924) = **Schistochila pinnatifolia** (Hook.) Trevis.

Original material: Hab. Tasmania (Jack misit).

Schistochila succulenta (J.J.Engel & R.M.Schust.) Xiao L.He & Glenny, Australian Systematic Botany 23(4): 237 (2010) ≡ **Pachyschistochila succulenta** J.J.Engel & R.M.Schust.

Basionym: *Pachyschistochila succulenta* J.J.Engel & R.M.Schust.

Schistochila tasmanica Steph., Species Hepaticarum 4: 86 (1909)

Original material: Hab. Tasmania.

Schistochila trispiralis R.M.Schust., Bulletin of the National Science Museum, Tokyo 11: 28 (1968) ≡ **Pachyschistochila trispiralis** (R.M.Schust.) R.M.Schust. & J.J.Engel

Original material: New Zealand: South Island: Mt Cook National Park, Sealy Range, above Sealy Lakes, *R.M.Schuster 67-497e*.

Schistochila tuloides (Hook.f. & Taylor) Steph., Species Hepaticarum 4: 89 (1909) ≡ **Gottschea tuloides** (Hook.f. & Taylor) Gottsche, Lindenb. & Nees

Basionym: *Jungermannia tuloides* Hook.f. & Taylor

Schizophyllopsis Váňa & L.Söderstr., Phytotaxa 152: 48 (2013)

Schizophyllopsis bidens (Reinw., Blume et Nees) Váňa & L.Söderstr., Phytotaxa 152: 48 (2013)

Basionym: *Jungermannia bidens* Reinw., Blume & Nees

Sendtnera attenuata Mitt., Flora Novae-Zelandiae 2(6): 153 (1854) ≡ **Lepicolea attenuata** (Mitt.) Steph.

Original material: Hab. Northern Island: Bay of Islands: J.D.H.

Seppeltia Grolle, Journal of the Hattori Botanical Laboratory 60: 276 (1986)

Seppeltia succuba Grolle, Journal of the Hattori Botanical Laboratory 60: 276 (1986)

Original material: MACQUARIE ISLAND, NW side of Green Gorge basin near mouth of small fern gully, in damp short tussock grassland of Festuca, Agrosris, 10 Nov 1984, leg. Seppelt 14701; JE (holotype), isotypes: herb. Seppelt, BM (ster.), G (ster.), HO (ster.).

Siphonolejeunea Herzog, Natural History of the Juan-Fernandez and Easter Islands 2(5): 744 (1924)

Siphonolejeunea bidentata (B.M.Thiers) M.A.M.Renner, Australian Systematic Botany 33: 320 (2020)

Basionym: *Austrolejeunea bidentata* B.M.Thiers

Siphonolejeunea elegantissima (Steph.) Grolle, Journal of the Hattori Botanical Laboratory 41: 405 (1976)

Basionym: *Trachylejeunea elegantissima* Steph.

Siphonolejeunea hamata (Grolle) M.A.M.Renner, Australian Systematic Botany 33: 320 (2020)

Basionym: *Nephelolejeunea hamata* Grolle

Siphonolejeunea jarmaniana (Grolle) M.A.M.Renner, Australian Systematic Botany 33: 320 (2020)

Basionym: *Austrolejeunea jarmaniana* Grolle

Siphonolejeunea nudipes (Hook.f. & Taylor) Herzog, Svensk Botanisk Tidskrift 42: 231 (1948)

Basionym: *Jungermannia nudipes* Hook.f. & Taylor

Siphonolejeunea occidentalis (Pócs) M.A.M.Renner, Australian Systematic Botany 33: 321 (2020)

Basionym: *Austrolejeunea occidentalis* Pócs

Siphonolejeunea olgae R.M.Schust., Beihefte zur Nova Hedwigia 9: 187 (1963)

Siphonolejeunea schiffneri (Steph. ex Schiffn.) Herzog, Svensk Botanisk Tidskrift 42: 230 (1948)

Basionym: *Pycnolejeunea schiffneri* Steph. ex Schiffn.

Siphonolejeunea subg. *Austrolejeunea* R.M.Schust., Beihefte zur Nova Hedwigia 9: 187 (1963) = **Siphonolejeunea** Herzog

Solenostoma Mitt., Journal of the Linnean Society, Botany 8: 51 (1865), *nom. cons.*

Solenostoma australe Steph., Species Hepaticarum 6: 79 (1917) = **Jungermannia wattsiana** Steph.

Original material: Hab. Australia. Bellenden Ker montes (Karsten legit).

Solenostoma hasskarliana (Nees) R.M.Schust. ex Váňa et D.G.Long, Nova Hedwigia 89 (3/4): 502 (2009)

Basionym: *Alicularia hasskarliana* Nees

Solenostoma humile (Hook.f. & Taylor) Mitt., Philosophical Transactions 168: 42 (1879) ≡ **Clasmatocolea humilis** (Hook.f. & Taylor) Grolle

Basionym: *Jungermannia humilis* Hook.f. & Taylor

Solenostoma infuscum (Mitt.) Hentschel, Plant Systematics and Evolution 268: 152 (2007)

Basionym: *Plectocolea infusca* Mitt.

Solenostoma inundatum (Hook.f. & Taylor) Mitt. ex Steph., Bulletin de l'Herbier Boissier Series 2 1: 490 (1901)

Basionym: *Jungermannia inundata* Hook.f. & Taylor

Solenostoma montanum (Steph.) Váňa, Phytotaxa 65: 44 (2012)

Basionym: *Nardia montana* Steph.

Solenostoma obliquifolium (Schiffn.) R.M.Schust. ex Váňa, Hentschel & Heinrichs, Cryptogamie Bryologie 31: 137 (2010)

Basionym: *Nardia obliquifolia* Schiffn.

Solenostoma orbiculatum (Colenso) R.M.Schust., Beihefte zur Nova Hedwigia 119: 380 (2002)

Basionym: *Gymnomitrion orbiculatum* Colenso

Solenostoma tetragonum (Lindenb.) R.M. Schust. ex Váňa & D.G. Long, Nova Hedwigia 89: 509 (2009)

Basionym: *Jungermannia tetragona* Lindenb.

Solenostoma truncatum (Nees) R.M.Schust. ex Váňa & D.G.Long, Nova Hedwigia 89 (3/4): 502 (2009)

Basionym: *Jungermannia truncata* Nees

Solenostoma wattsianum (Steph.) R.M.Schust. ex Váňa, Hentschel & Heinrichs, Cryptogamie Bryologie 31: 138 (2010) = **Solenostoma montanum** (Steph.) Váňa

Basionym: *Jungermannia wattsiana* Steph.

Sphaerocarpos Boehm., Definitiones Generum Plantarum Edn. 3: 501–502 (1760)

Sphaerocarpos texanus Austin, Bulletin of the Torrey Botanical Club 6: 158 (1875)

Original material: Texas, 1849.--C. Wright.

Sphenolobus niger Rodway, Tasmanian Bryophyta 2: 33 (1916) ≡ **Allisoniella nigra** (Rodway) R.M.Schust.

Original material: On rocks in rivulet, Cradle Mountain.

Sphenolobus perigonialis f. *submersus* Rodway, Tasmanian Bryophyta 2: 33 (1916) ≡ **Andrewsianthus perigonialis** (Hook.f. & Taylor) R.M.Schust.

Original material: Lake Leila, Cradle Mt.

Spruceanthus Verd., Annales Bryologici Supplement 4: 159 (1934)

Spruceanthus planiusculus (Mitt.) X.Q.Shi, R.L.Zhu & Gradst., Taxon 64: 889 (2015)

Basionym: *Lejeunea planiuscula* Mitt.

Spruceanthus polymorphus (Sande Lac.) Verdoorn, Annales Bryologici Supplement 4: 155 (1934)

Basionym: *Phragmicoma polymorpha* Sande Lac.

Spruceanthus semirepandus (Nees) Verd., Annales Bryologici Supplement 4: 153 (1934)

Basionym: *Jungermannia semirepanda* Nees

Spruceanthus thozetianus (Gottsche & F.Muell.) B.M.Thiers & Gradst., Memoirs of the New York Botanical Garden 52: 62 (1989)

Basionym: *Phragmicoma thozetiana* Gottsche & F.Muell.

Stenolejeunea R.M.Schust., Beihefte zur Nova Hedwigia 9: 144 (1963) = **Lejeunea** Lib.

Stenolejeunea apiculata (Sande Lac.) R.M.Schust., Beihefte zur Nova Hedwigia 9: 144 (1963) ≡ **Lejeunea apiculata** Sande Lac.

Basionym: *Lejeunea apiculata* Sande Lac.

Stenolejeunea dentata (Steph.) Pócs, Annales Botanici Fennici 32: 263 (1995) ≡ **Lejeunea stenodentata** M.A.M.Renner & Pócs

Basionym: *Drepanolejeunea dentata* Steph.

Stictolejeunea (Spruce) Schiffn., Hepaticae. Die Naturlichen Pflanzenfamilien 1(3): 119, 131 (1893)

Basionym: *Lejeunea* subg. *Stictolejeunea* Spruce

Stictolejeunea balfourii (Mitt.) E.W.Jones, Journal of Bryology 9: 50 (1976)

Basionym: *Lejeunea balfourii* Mitt.

Stictolejeunea richardsii Herzog, Transactions of the British Bryological Society 1: 318 (1950) = **Stictolejeunea balfourii** var. **balfourii**

Stolonivector J.J.Engel, Journal of the Hattori Botanical Laboratory 69: 80 (1991)

Stolonivector obtusilobus J.J.Engel, Nova Hedwigia 88: 337 (2009)

Original material: New Zealand: North Island: Southern North Island Ecological Province, Ruahine Forest Park, NW Ruahine Range, vicinity of Makirikiri Tarns, N of Te Rakaunuiakura and NW of Makirikiri peak, c. 1100 m, *Engel 28088A & von Konrat* (holo: F; iso: AK).

Strepsilejeunea austrina Spruce ex Watts, Proceedings of the Linnean Society of New South Wales, ser. 2 26: 634 (1902)[1901] = **Cheilolejeunea mimosa** (Hook.f. & Taylor) R.M.Schust.

Strepsilejeunea austrina Spruce ex Steph., Hedwigia 28: 260 (1889), *nom. inval.* = **Cheilolejeunea mimosa** (Hook.f. & Taylor) R.M.Schust.

Original material: Hab. Gippsland, leg. Luchmann 1881, Bauerlen 1887: Sydney leg. Whitelegge.

Strepsilejeunea campbelliensis Steph., Hepaticarum species novae IX. Hedwigia 35: 128 (1896) ≡ **Cheilolejeunea campbelliensis** (Steph.) R.M.Schust.

Original material: Hab. Campbell Islands (Kirk 306).

Strepsilejeunea comitans (Hook.f. & Taylor) Steph., Species Hepaticarum 5: 291 (1913) ≡ **Cheilolejeunea comitans** (Hook.f. & Taylor) R.M.Schust.

Basionym: *Lejeunea comitans* Hook.f. & Taylor

Strepsilejeunea mimosa (Hook.f. & Taylor) Steph., Hedwigia 28: 85 (1890) ≡ **Cheilolejeunea mimosa** (Hook.f. & Taylor) R.M.Schust.

Basionym: *Jungermannia mimosa* Hook.f. & Taylor

Symbiezidium subfuscum (Nees) Trevis., Memorie del Reale Istituto Lombardo di Scienze e Lettere, Serie 3, Classe di Scienze Matematiche e Naturali 4: 403 (1877) ≡ **Lopholejeunea subfusca** (Nees) Schiffn.

Basionym: *Jungermannia subfusca* Nees

Symphyogyna Nees & Mont., Annales des Sciences Naturelles; Botanique 5: 66 (1836)

Symphyogyna hymenophyllum (Hook.) Nees et Mont., Annales des Sciences Naturelles; Botanique, sér. 2 5: 68 (1836)

Basionym: *Jungermannia hymenophyllum* Hook.

Symphyogyna interrupta Carrington & Pearson, Proceedings of the Linnean Society of New South Wales, Series 2 2: 1053 (1888)

Original material: None cited, but published in 'Hepaticae collected by Mr T. Whitelegge in N. S. Wales.'

Symphyogyna irregularis Steph., Memoires de l'Herbier Boissier 11: 29 (1900)

Symphyogyna lacerosquama Steph., Species Hepaticarum 6: 67 (1917)

Original material: Hab. New South Wales (Watts legit.).

#Symphyogyna lehmanniana Mont. & Nees, Synopsis Hepaticarum 4: 483 (1846)

Original material: In Promontorio Bonae Spei in vertice ad latus boreale montis Tabularis locis umbrosis, mense Octobri cum fructu, etiam in monte Diaboli (Ecklon in Hb. L., Lg. et N.).

No specimens supporting the Australian report of this species have been located. We regard the Australin record of this species, which is of uncertain taxonomic status, from Australia as erroneous, and exclude it from the Australian flora.

Symphyogyna multiflora Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 133 (1914)

Original material: Hab. Australia, New South Wales (Valley of Waters): Watts legit, 1127.

Symphyogyna podophylla (Thunb.) Mont. & Nees, Synopsis Hepaticarum 4: 481 (1846)

Basionym: *Jungermannia podophylla* Thunb.

Symphyogyna pulchra Taylor, London Journal of Botany 5: 410 (1846) = **Symphyogyna podophylla** (Thunb.) Mont. & Nees

Original material: Hab. Swan River. Mr. James Drummond.

Symphyogyna rhodina (Hook.f. & Taylor) Taylor ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 4: 487 (1846)

Basionym: *Jungermannia rhodina* Hook.f. & Taylor

Symphyogyna semi-involucrata Austin, Bulletin of the Torrey Botanical Club 5: 15 (1874)

Original material: Oahu.

Symphyomitra weymouthii Pearson, Bulletin of Miscellaneous Information, Royal Gardens, Kew 2: 70 (1924) = **Acrobolbus concinnus** (Mitt.) Grolle

Syzygiella Spruce, Journal of Botany 5: 234 (1876)

Syzygiella colorata (Lehm.) Feldberg, Váňa, Hentsche & Heinrichs, Cryptogamie Bryologie 31: 144 (2010)

Basionym: *Jungermannia colorata* Lehm.

Syzygiella nigrescens (Steph.) Feldberg, Váňa, Hentsche & Heinrichs, Cryptogamie Bryologie 31: 143 (2010)

Basionym: *Jamesoniella nigrescens* Steph.

Syzygiella nigrescens does not occur in Australia.

Syzygiella sonderi (Gottsche) Feldberg, Váňa, Hentsche & Heinrichs, Cryptogamie Bryologie 31: 143 (2010)

Basionym: *Jungermannia sonderi* Gottsche

Syzygiella tasmanica (Hook.f. & Taylor) K.Feldberg, Váňa, Hentschel & Heinrichs, Cryptogamie Bryologie 31: 144 (2010)

Basionym: *Jungermannia tasmanica* Hook.f. & Taylor

Syzygiella teres (Carrington & Pearson) Váňa, Phytotaxa 76: 35 (2013)

Basionym: *Jungermannia teres* Carrington & Pearson

Targionia L., Species Plantarum 2: 1136 (1753)

Targionia hypophylla L., Species Plantarum 2: 1136 (1753)

Targionia lorbeeriana Müll. Frib., Hedwigia 79: 78 (1940)

Original material: Italy, Sicily, leg. Huber.

Targionia michelii Corda, Naturalientausch 12: 649 (1829) = **Targionia hypophylla** L.

Original material: Italy. Sieber s.n.

Targionia orbicularis Schwein., Specimen Florae Americae Septentrionalis Cryptogamicae 23 (1821) ≡ **Notothylas orbicularis** (Schwein.) Sull.

Original material: hitherto found by me only in my own bottom garden, in fructification, December and January.

Taxilejeunea = **Lejeunea** Lib.

Taxilejeunea convexa Steph., Hedwigia 28: 262 (1889) = **Lejeunea microloba** Taylor

Original material: Hab. Norfolk Island, leg. Isaac Robinson.

Telaranea Spruce ex Schiffn., Die Naturlichen Pflanzenfamilien 1(3): 103 (1893)

Telaranea capilligera (Schwägr.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 256 (1963) ≡ **Neolepidozia capilligera** (Schwägr.) Fulford & J.Taylor

Basionym: *Jungermannia capilligera* Schwägr.

Telaranea centipes (Taylor) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 256 (1963) ≡ **Ceramanus centipes** (Taylor ex Gotsche, Lindenb. & Nees) E.D.Cooper

Basionym: *Lepidozia centipes* Taylor ex Gottsche, Lindenb. & Nees

Telaranea clatritexta (Steph.) J.J.Engel & G.L.Merr., Novon 9: 339 (1999) ≡ **Ceramanus clatritexta** (Steph.) E.D.Cooper

Basionym: *Lepidozia clatritexta* Steph.

Telaranea consobrina J.J.Engel & G.L.Merr., Novon 9: 339 (1999) ≡ **Neolepidozia consobrina** (J.J.Engel & G.L.Merr.) E.D.Cooper

Original material: Tasmania: Eastern slope of Black Bluff just below summit, S of Burnie, 1250 m, 21 Mar. 1977, *J.J. Engel 15799* (holo: F; iso: HO).

Telaranea disparata J.J.Engel & G.L.Merr., Fieldiana, Botany, n.s. 44: 147 (2004) ≡ **Neolepidozia disparata** (J.J.Engel & G.L.Merr.) E.D.Cooper

Original material: Queensland: Daintree Region, Noah Creek, 23 Jul. 1991, *Stone s.n.* (holo: MELU; iso: F).

Telaranea elegans (Colenso) J.J.Engel & G.L.Merr., Phytologia 79: 251 (1996) ≡ **Ceramanus elegans** (Colenso) E.D.Cooper

Basionym: *Lepidozia elegans* Colenso

Telaranea fragilifolia (R.M.Schust.) J.J.Engel & G.L.Merr., Fieldiana, Botany, n.s 44: 90 (2004)

Basionym: *Kurzia fragilifolia* R.M.Schust.

Telaranea gottscheana (Lindenb.) E.A.Hodgs., Records of the Dominion Museum 4: 106 (1962) = **Neolepidozia patentissima** (Hook.f. & Taylor) E.D.Cooper

Basionym: *Lepidozia gottscheana* Lindenb.

Telaranea grossiseta (Steph.) J.J.Engel & R.M.Schust., Fieldiana, Botany, n.s 14: 3 (1983) ≡ **Ceramanus grossiseta** (Steph.) E.D.Cooper

Basionym: *Lepidozia grossiseta* Steph.

Telaranea herzogii (E.A.Hodgs.) E.A.Hodgs., Records of the Dominion Museum 4: 106 (1962)

Basionym: *Lepidozia herzogii* E.A.Hodgs.

Telaranea inaequalis R.M.Schust. ex J.J.Engel & G.L.Merr., Fieldiana, Botany, n.s. 44: 117 (2004)

Original material: Tasmania: Gordon River, Sir John Falls, just upriver from Butler Is., seal level, *J.J. Engel 14685B* (holo: F; iso: HO).

Telaranea jowettiana H.A.Mill. Journal of Bryology 14: 235 (1986) ≡ **Tricholepidozia jowettiana** (H.A.Mill.) E.D.Cooper

Original material: Norfolk Island: Mount Pitt, 250–300 m, *Jowett 16* (holo: MU; isotypes: BM, CANB).

Telaranea lindenbergii (Gottsche) J.J.Engel & G.L.Merr., Phytologia 79: 252 (1995)[1996] ≡ **Tricholepidozia lindenbergii** (Gottsche) E.D.Cooper

Basionym: *Lepidozia lindenbergii* Gottsche

Telaranea pallescens (Grolle) J.J.Engel & G.L.Merr., Fieldiana, Botany, n.s. 44: 87 (2004) ≡ **Kurzia pallescens** Grolle

Basionym: *Kurzia pallescens* Grolle

Telaranea palmata J.J.Engel & G.L.Merr., Novon 9: 344 (1999) ≡ **Neolepidozia palmata** (J.J.Engel & G.L.Merr.) E.D.Cooper

Original material: Tasmania: ridge SE of Black Bluff near junction of access road to plateau area and road to Devonport gold mines, S facing slope, S of Burnie, 1000 m, *J.J. Engel 16251* (holo: F; iso: HO).

Telaranea patentissima (Hook.f. & Taylor) E.A.Hodgs., Records of the Dominion Museum 4: 107 (1962) ≡ **Neolepidozia patentissima** (Hook.f. & Taylor) E.D.Cooper

Basionym: *Jungermannia patentissima* Hook.f. & Taylor

Telaranea patentissima var. *ampliata* J.J.Engel & G.L.Merr., Fieldiana, Botany, n.s. 44: 48 (2004) ≡ **Neolepidozia patentissima** var. **ampliata** (J.J.Engel & G.L.Merr.) E.D.Cooper

Original material: New Zealand: Otago Prov. Mt Maungatua, W of Mosgiel, 500 m, *J.J. Engel 17777* (holo: F; iso: HO).

Telaranea patentissima var. *zebrina* J.J.Engel & G.L.Merr., Fieldiana, Botany, n.s. 44: 50 (2004) ≡ **Neolepidozia patentissima** var. **zebrina** (J.J.Engel & G.L.Merr.) E.D.Cooper

Original material: New Zealand: North Island: Puketi Forest, 6 Dec. 1993, *Braggins 93/172* (holo: AKU; iso: F).

Telaranea praenitens (Lehm. & Lindenb.) E.A.Hodgs., Records of the Dominion Museum 4: 107 (1962) ≡ **Neolepidozia praenitens** (Lehm. & Lindenb.) E.D.Cooper

Basionym: *Jungermannia praenitens* Lehm. & Lindenb.

Telaranea pulcherrima (Steph.) R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 256 (1963) ≡ **Tricholepidozia pulcherrima** (Steph.) E.D.Cooper

Basionym: *Lepidozia pulcherrima* Steph.

Telaranea pulcherrima var. *mooreana* (Steph.) J.J.Engel & G.L.Merr., Fieldiana, Botany, n.s. 44: 79 (2004) ≡ **Tricholepidozia pulcherrima** var. **mooreana** (Steph.) E.D.Cooper

Basionym: *Lepidozia mooreana* Steph.

Telaranea quadricilia (Steph.) J.J.Engel & G.L.Merr., Novon 9: 344 (1999) ≡ **Tricholepidozia quadriseta** (Steph.) E.D.Cooper

Basionym: *Lepidozia quadricilia* Steph.

Telaranea quadriseta (Steph.) J.J.Engel & G.L.Merr., Fieldiana, Botany, n.s. 44: 95 (2004) ≡ **Tricholepidozia quadriseta** (Steph.) E.D.Cooper

Basionym: *Lepidozia quadriseta* Steph.

Telaranea quadristipula (Steph.) J.J.Engel & G.L.Merr., Fieldiana, Botany, n.s. 44: 20 (2004) ≡ **Neolepidozia quadristipula** (Steph.) E.D.Cooper

Basionym: *Lepidozia quadristipula* Steph.

Telaranea subg. *Tricholepidozia* R.M.Schust., Journal of the Hattori Botanical Laboratory 26: 256 (1963) = **Tricholepidozia** (R.M.Schust.) E.D.Cooper

Telaranea tasmanica (Steph.) J.J.Engel & G.L.Merr., Phytologia 79: 253 (1996) ≡ **Kurzia tasmanica** (Steph.) E.D.Cooper

Basionym: *Lepidozia tasmanica* Steph.

Telaranea tetradactyla (Hook.f. & Taylor) E.A.Hodgs., Records of the Dominion Museum 4: 106 (1962) ≡ **Neolepidozia tetradactyla** (Hook.f. & Taylor) Fulford & J.Taylor

Basionym: *Jungermannia tetradactyla* Hook.f. & Taylor

Telaranea tridactylis (Lehm. & Lindenb.) J.J.Engel & G.L.Merr., Phytologia 79: 253 (1996) = **Neolepidozia tridactylis** (Lehm. et Lindenb.) E.D.Cooper

Basionym: *Jungermannia tridactylis* Lehm. & Lindenb.

Telaranea trilobata (R.M.Schust.) J.J.Engel & Merrill, Fieldiana Botany 44: 89 (2004) ≡ **Kurzia trilobata** (R.M.Schust.) R.M.Schust.

Basionym: *Kurzia quadriseta* var. *trilobata* R.M.Schust.

Telaranea verruculosa J.J.Engel & Merrill, Fieldiana, Botany, n.s 44: 197 (2004) ≡ **Neolepidozia verruculosa** (J.J.Engel & G.L.Merr.) E.D.Cooper

Original material: Queensland: Kuranda, Wright's Lookout Surprise to Creek Track, 9 Jul. 1994, *Scott s.n.* (MELU 1668).

Temnoma Mitt., Handbook of the New Zealand Flora 2: 750, 753 (1867)

Temnoma palmatum (Lindb. ex Pearson) R.M.Schust., The Bryologist 62: 240 (1959)

Basionym: *Blepharostoma palmatum* Lindb. ex Pearson

#Temnoma pulchellum (Hook.) Mitt. ex Bastow, Papers and Proceedings of the Royal Society of Tasmania 1887: 226 (1888)

Basionym: *Jungermannia pulchella* Hook.

Temnoma pulchellum is endemic to New Zealand.

#Temnoma quadrifidum (Mitt.) Mitt. ex E.A.Hodgs. & Allison, Transactions of the Royal Society of New Zealand. Botany 1(12): 142 (1962)

Basionym: *Jungermannia quadrifida* Mitt.

Temnoma quadrifidum does not occur in Australia.

Temnoma quadripartitum (Hook.) Mitt., Journal of the Linnean Society, Botany 15: 68. 1876[1877].

Basionym: *Jungermannia quadripartita* Hook.

Temnoma schusteri E.A.Hodgs. & Allison, Transactions of the Royal Society of New Zealand. Botany 1 (12): 147 (1962) ≡ **Archeophylla schusteri** (E.A.Hodgs. & Allison) R.M.Schust.

Temnoma townrowiorum R.M.Schust., Candollea 21: 351 (1966)

Tetracymbaliella Grolle, Nova Hedwigia 3: 48 (1961)

#Tetracymbaliella cymbalifera (Hook.f. & Taylor) Grolle, Nova Hedwigia 3: 50 (1961)

Basionym: *Jungermannia cymbalifera* Hook.f. & Taylor

Tetracymbaliella cymbalifera is endemic to New Zealand.

Tetracymbaliella decipiens (Gottsche) Grolle, Nova Hedwigia 3: 49 (1961)

Basionym: *Chiloscyphus decipiens* Gottsche

Tetracymbaliella rodwayana Grolle, Nova Hedwigia 3: 52 (1961) = **Tetracymbaliella subsimplex** (Austin) J.J.Engel

Original material: Tasmania: Wilmot, 1927, Weindorfer, herb. Herzog.

Tetracymbaliella subsimplex (Austin) J.J.Engel, Phytotaxa 207: 185 (2015)

Basionym: *Polyotus subsimplex* Austin

Thysananthus Lindenb., Novarum et Minus Cognitarum Stirpium Pugillus 8: 24 (1844)

Thysananthus auriculatus (Wilson & Hook) Sukkharak & Gradst., Phytotaxa 326: 102 (2017)

Basionym: *Jungermannia auriculata* Wilson & Hook.

Expected to occur in Australia according to Thiers and Gradstein (1989).

Thysananthus australis (Steph.) B.M.Thiers & Gradst., Memoirs of the New York Botanical Garden 52: 66 (1989)

Basionym: *Archilejeunea australis* Steph.

Thysananthus calcaratus (Steph.) Sukkharak & Gradst., Phytotaxa 326: 102 (2017)

Basionym: *Archilejeunea calcarata* Steph.

Thysananthus convolutus Lindenb., Synopsis Hepaticarum 2: 288 (1845)

Original material: Habitat in Java insula.

Thysananthus frauenfeldii Reichardt, Verhandlungen der Kaiserlich-Königlichen Zoologisch-Botanischen Gesellschaft in Wien 16: 958 (1866)

Original material: Tahiti. An Baumstämmen um Papiete; leg. Jelinek.

Thysananthus fruticosus (Lindenb. & Gottsche) Schiffn., Hepaticae. Die Naturlichen Pflanzenfamilien 1(3): 130 (1893)

Basionym: *Bryopteris fruticosa* Lindenb. & Gottsche

Thysananthus humilis (Gottsche) Sukkharak & Gradst., Phytotaxa 326: 102 (2017)

Basionym: *Phragmicoma humilis* Gottsche

Thysananthus indicus (Steph.) Sukkharak & Gradst., Phytotaxa 326: 102 (2017)

Basionym: *Mastigolejeunea indica* Steph.

Thysananthus integrifolius Steph., Species Hepaticarum 4: 788 (1912) = **Thysananthus indicus** (Steph.) Sukkharak & Gradst.

Original material: Hab. Possession Island (Torres Street) [sic].

Thysananthus ligulatus (Lehm. & Lindenb.) Sukkharak & Gradst., Phytotaxa 326: 102 (2017)

Basionym: *Jungermannia ligulata* Lehm. & Lindenb.

Thysananthus planus Sande Lac., Nederlandsch Kruidkundig Archief 3: 419 (1853) = **Thysananthus retusus** (Reinw., Blume & Nees) B.M.Thiers & Gradst.

Original material: None cited.

Thysananthus repletus (Taylor) Sukkharak & Gradstein, Phytotaxa 326(2): 103 (2017)

Basionym: *Lejeunea repleta* Taylor

Thysananthus retusus (Reinw., Blume & Nees) B.M.Thiers & Gradst., Memoirs of the New York Botanical Garden 52: 66 (1989)

Basionym: *Jungermannia retusa* Reinw., Blume & Nees

Thysananthus spathulistipus (Reinw., Blume & Nees) Lindenb., Synopsis Hepaticarum 2: 187 (1845)

Basionym: *Jungermannia spathulistipa* Reinw., Blume & Nees

Thysananthus subg. **Mastigolejeunea** (Spruce) Sukkharak & Gradst., Phytotaxa 326: 101 (2017)

Basionym: *Lejeunea* subg. *Mastigolejeunea* Spruce

Thysananthus virens Angstr., Ofversigt Kongl. Vetenskaps-Akademiens Forhandlingar 30(5): 131 (1873)

Original material: Habitat inter muscos in Tahiti et in costice arborum in Eimeo.

Trachylejeunea elegantissima Steph., Hedwigia 28: 262 (1889) = **Siphonolejeunea elegantissima** (Steph.) Grolle

Trachylejeunea oahuensis A.Evans, Transactions of the Connecticut Academy of Arts and Sciences 10: 434 (1900) = **Cheilolejeunea decursiva** (Sande Lac.) R.M.Schust.

Treubia K.I.Goebel, Annales de Jardin Botanique de Buitenzorg 9: 1 (1890), *nom. cons.*

#Treubia insignis K.I.Goebel, Annales de Jardin Botanique de Buitenzorg 9: 1 (1890)

Original material: Anfang Februar 1886 fand ich bei Tjibodas an einem feuchten , schattigen Standort , nahe dem Waldrande auf vermodernden Baumstammen ein Lebermoos, welches jedenfalls zu den grossten und schonsten Vertretern dieser formenreichen Pflanzenklasse gehort.

Treubia insignis does not occur in Australia.

Treubia lacunosa (Colenso) Prosk., The Bryologist 58: 199 (1955)

Basionym: *Noteroclada lacunosa* Colenso

Treubia tasmanica R.M.Schust. & G.A.M.Scott, Journal of the Hattori Botanical Laboratory 32: 248 (1969)

Original material: Tasmania: Camp Creek, Mt Arrowsmith, Jan. 1962, *R.M. Schuster 50376* (holo: herb. R.M. Schuster).

Triandrophyllum Fulford & Hatcher, The Bryologist 64: 349 (1962)

Triandrophyllum subtrifidum (Hook.f. & Taylor) Fulford & Hatcher, The Bryologist 64: 350 (1962)

Basionym: *Jungermannia subtrifida* Hook.f. & Taylor

Trichocolea Dumort., Commentationes Botanicae: 113 (1822), *nom. cons.*

Trichocolea australis Steph., Species Hepaticarum 4: 62 (1909) = **Trichocolea mollissima** (Hook.f. & Taylor) Gottsche

Original material: Hab. Nova Zelandia, valde communis.

Trichocolea elegans Lehm., Novarum et Minus Cognitarum Stirpium Pugillus 10: 8 (1857) ≡ **Leiomitra elegans** (Lehm.) Hässel

Original material: Detecta est in Valdivia ad arborum truncos.

Trichocolea hatcheri E.A.Hodgs., Transactions of the Royal Society of New Zealand. Botany 3(4): 69 (1965)

Original material: New Zealand: North Island: Roto-kui Bush, east of Taupo, 1934, *K.W. Allison 7558* (MPN ex herb. Hodgson 7558).

Trichocolea minutifolia Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 134 (1914)

Original material: Hab. Australia (Wyong): Watts legit, 950.

The status of *Trichocolea minutifolia* requires further investigation.

Trichocolea mollissima (Hook.f. & Taylor) Gottsche, Annales des Sciences Naturelles; Botanique 1: 132 (1864)

Basionym: *Jungermannia mollissima* Hook.f. & Taylor

Trichocolea pluma (Reinw., Blume & Nees) Mont., Voyage autour du monde exécuté pendant les années 1836 et 1837 sur la corvette la Bonite,commandée par M. Vaillant. Botanique: 238 (1846)

Basionym: *Jungermannia pluma* Reinw., Blume & Nees

Trichocolea rigida R.M.Schust., Nova Hedwigia 15: 447 (1968)

Original material: New Zealand: South Island: Otago Province, Old Man Ra., ca. 4000 ft, *R.M. Schuster 67-523* (holo: herb. Schuster; iso: herb. Grolle; NICH, OTA, S).

Trichocolea wattsiana Steph., Journal and Proceedings of the Royal Society of New South Wales 48: 135 (1914)

Original material: Hab. Australia (Wyong): Watts, 986.

There are only two packets of *Trichocolea wattsiana* present in the NSW type collection, both bear the Watts collecting number 946, suggesting the collecting number in the protologue is erroneous.

Tricholepidozia (R.M.Schust.) E.D.Cooper, Phytotaxa 97: 58 (2013)

Basionym: *Telaranea* subg. *Tricholepidozia* R.M.Schust.

Tricholepidozia jowettiana (H.A.Mill.) E.D.Cooper, Phytotaxa 97(2): 59 (2013)

Basionym: *Telaranea jowettiana* H.A.Mill.

Tricholepidozia lindenbergii (Gottsche) E.D.Cooper, Phytotaxa 97(2): 59 (2013)

Basionym: *Lepidozia lindenbergii* Gottsche

Tricholepidozia pulcherrima (Steph.) E.D.Cooper, Phytotaxa 97: 60 (2013)

Basionym: *Lepidozia pulcherrima* Steph.

Tricholepidozia pulcherrima var. *pulcherrima* is endemic to New Zealand.

Tricholepidozia pulcherrima var. **mooreana** (Steph.) E.D.Cooper, Phytotaxa 97: 60 (2013)

Basionym: *Lepidozia mooreana* Steph.

Tricholepidozia quadriseta (Steph.) E.D.Cooper, Phytotaxa 97: 60 (2013)

Basionym: *Lepidozia quadriseta* Steph.

Trichotemnoma R.M.Schust., Nova Hedwigia 15: 440 (1968)

Trichotemnoma corrugatum (Steph.) R.M.Schust., Nova Hedwigia 15: 440 (1968)

Basionym: *Blepharostoma corrugatum* Steph.

Tuyamaella S.Hatt., Journal of the Hattori Botanical Laboratory 5: 60 (1951)

Tuyamaella serratistipa S.Hatt., Botanical Magazine (Tokyo) 64: 118 (1951)

Tylimanthus Mitt., Handbook of the New Zealand Flora 2: 753 (1867) = **Acrobolbus** Nees

Tylimanthus bisetulus Steph., Species Hepaticarum 6: 246 (1922) = **Pseudomarsupidium piliferum** (Steph.) Herzog ex Grolle

Original material: Hab. Nova Caledonia (Lerat legit).

Tylimanthus diversifolius E.A.Hodgs., Transactions of the Royal Society of New Zealand 85: 575 (1958) ≡ **Acrobolbus tenellus** var. **diversifolius** (E.A.Hodgs.) Briscoe

Original material: New Zealand, South Is., Bealey River, 1874, Berggren.

Tylimanthus flaccidus Berggr., On New Zealand Hepaticae 1: 30 (1898) = **Acrobolbus tenellus** (Taylor ex Lehm.) Trevis.

Tylimanthus perpusillus Colenso, Transactions and Proceedings of the New Zealand Institute 19: 286 (1887) ≡ **Acrobolbus perpusillus** (Colenso) Briscoe

Original material: Waipawa, near Porangahau, 1886, H. Hill.

Tylimanthus pseudosaccatus Grolle, Nova Hedwigia 6: 391 (1963) ≡ **Acrobolbus pseudosaccatus** (Grolle) Briscoe

Original material: Tasmania, Lerena, Rechereche, Weymouth.

Tylimanthus saccatus (Hook.) Mitt., Handbook of the New Zealand Flora 2: 753 (1867) ≡ **Acrobolbus saccatus** (Hook.) Trevis.

Basionym: *Jungermannia saccata* Hook.

Tylimanthus tenellus (Taylor ex Lehm.) Mitt., Philosophical Transactions of the Royal Society of London 168: 44 (1879) ≡ **Acrobolbus tenellus** (Taylor ex Lehm.) Trevis.

Basionym: *Gymnanthe tenella* Taylor ex Lehm.

Tylimanthus viridis Mitt., Journal of the Linnean Society, Botany 15: 197 (1877) = **Acrobolbus viridis** (Mitt) Briscoe & J.J.Engel.

Umbraculum muelleri Gottsche, Annales des Sciences Naturelles; Botanique 1: 181 (1864) = **Hymenophyton flabellatum** (Labill.) Dumort. ex Trevis.

Original material: In Australia felice, Mount Tomar, Blue Mountains, Dr Fr. Müller pauca specimina cum flore fem. collegit.

Vandiemenia Hewson, Journal of the Hattori Botanical Laboratory 52: 163 (1982)

Vandiemenia ratkowskyana Hewson, Journal of the Hattori Botanical Laboratory 52: 163 (1982)

Original material: Tasmania: Milles Track near Wellington Falls, Mt Wellington, Hobart, *A. Ratkowsky 80/119* (holo: CANB (lost); replacement lecto (here designated): HO304298).

The holotype has been lost, an uncited isotype in HO is designated lectotype in this checklist, above.

Wettsteinia Schiffn., Annales de Jardin Botanique de Buitenzorg Suppl. 2: 44 (1898)

Wettsteinia inversa (Sande Lac.) Schiffn., Annales de Jardin Botanique de Buitenzorg Suppl. 2: 45 (1898)

Basionym: *Plagiochila inversa* Sande Lac.

Wettsteinia schusteriana Grolle, Journal of the Hattori Botanical Laboratory 28: 99 (1965)

Original material: New Zealand: South Island: Fiordland Natl. Park, Cascade Creek, J. Burrell, G.A.M. Scott & J. Taylor (CHR)

Zoopsis (Hook.f. & Taylor) Hook.f. ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 4: 473 (1846)

Basionym: *Jungermannia* subg. *Zoopsis* Hook.f. & Taylor

Zoopsis argentea (Hook.f. & Taylor) Hook.f. ex Gottsche, Lindenb. & Nees, Synopsis Hepaticarum 4: 473 (1846)

Basionym: *Jungermannia argentea* Hook.f. & Taylor

Zoopsis argentea var. **flagelliformis** (Colenso) R.M.Schust., Nova Hedwigia 68: 38 (1999)

Basionym: *Zoopsis flagelliformis* Colenso

Zoopsis flagelliformis Colenso, Transactions and Proceedings of the New Zealand Institute 18: 250 (1886) ≡ **Zoopsis argentea** var. **flagelliformis** (Colenso) R.M.Schust.

Original material: Hab. Among other Hepatica on decaying logs ; wet forests, Norsewood, County of Waipawa ; 1885 : W.C. (Same localities ; October, 1885: W.C.

Zoopsis leitgebiana (Carrington & Pearson) Bastow, Papers and Proceedings of the Royal Society of Tasmania 1887: 269 (1888)

Basionym: *Cephalozia leitgebiana* Carrington & Pearson

Zoopsis liukiuensis Horik., Journal of Science of the Hiroshima University: Series B, Division 2 (Botany) 1: 65 (1931)

Zoopsis lobulata Colenso, Transactions and Proceedings of the New Zealand Institute 18: 250 (1886) ≡ **Riccardia lobulata** (Colenso) E.A.Hodgs.

Original material: Hab. On denuded rotten logs, in large continuous patches; shaded wet forests, near Norsewood, County of Waipawa; 1885: W.C,

Zoopsis setigera K.I.Goebel, Flora 77: 93 (1893)

Zoopsis setulosa Leitg., Mitteilungen des Naturwissenschaftlichen Vereines fur Steiermark 6: 24 (1876)

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